PROJECT MANAGEMENT MEMORY

A Pocket Guide for Project Teams

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Project Management Memory

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How to Use this Book

This pocket guide provides a variety of examples, visual cues, design features, and clear, friendly language that we hope will encourage project teams everywhere to use this book, and use it often! Everyone on a project team can use this book as a daily reference on the job and/or as a supplement to training. Have fun!

To Find a Topic

Use the contents page at the front of the book, or the chart at the beginning of every chapter (shown below).

When you need to...	Do this activity	Page #

To Find the Start of Each Chapter

Look for the blue box at the bottom of the page.

To See at a Glance What Activities Must be Done for Your Project

First determine the type of project you have. (See page 7 for the distinctions between projects.) Next, look for the key icons that match your project type. Skip the activities that don't show the correct key icon for your project.


ALL project types


ONLY project **types 2 - 3**


ONLY project type

To Find Tips Pitfalls

Look for this icon:

To Find Each Piece of the Study that is Illustrated Through the Book

Look for the **pad** or other graphics that a graph paper in them.

Contents

Leadership Summary

Why do organizations need project management?

Project management:

- ensures that customer requirements are met.
- "reinventing the wheel" by standardizing routine project work.
- reduces the number of that could be overlooked during the project.
- eliminates duplication of effort.
- that projects are in **control.**
- maximizes the use of

What is involved in management process?

- A decision is made to launch a project.
- A charter is prepared, which outlines the requirements and limitations of the project. The is written the sponsor in collaboration with either the project leader or the management steering group.
- with the project distributed to management and key project stakeholders.
- The project plan is drafted by the team, approved by the sponsor, and to management and key stakeholders.
- The plan and the a product, process, or plan, are to the customers.
- The project is **evaluated** and a close-out report is written and to management and key

Who Has Project Accountability?

Person or group	Is accountable for:
Senior Management	• Ensuring that the organization has a project management process that project teams can follow. • Providing the resources to support selected projects.
Functional Manager	• Providing resources from his or her area to support the project. • Supporting the project objectives.
Sponsor	• Ensuring that the project has clear direction and support. • Providing a charter to the project team. • Ensuring that the project plan meets both the customers' needs and the organization's needs.
Team Leader	• Ensuring that the project satisfies both the customer and the organization. • Ensuring that the project is completed on time and within the project's limits and constraints.
Team Member	• Ensuring that his or her part of the project work satisfies the needs of the project and is completed on time and within budget.

Chapter 1

Creating Successful Projects

Know the Geography

Whether you've been on a hundred journeys with project teams or you're a first time traveler, you and your team need a common understanding of what the terrain will look like when you get involved in projects and project management. This understanding will help your team stay on the most direct route to your destination.

What is a project?

A project is any temporary, organized effort that creates a unique product, service, process, or plan. It can be as simple as the plan for an off-site retreat or as complex as the construction of a medical center, with a team size ranging from a few people to hundreds or even thousands who are working in one location or across continents.

Projects bring together people from a range of jobs and provide them with the opportunity to collaborate in a unique way. Because projects are so diverse and flexible, organizations have increasingly used them as the preferred way to fulfill the needs of their customers.

What is a successful project?

All project teams can judge the success of their projects in the same way:

- The customer is satisfied or delighted with the final deliverable (a product, service, process, or plan).
- The deliverable is given to the customer on time.
- The project team has stayed within the budget and staffing allocations.
- Team members have increased their skills and knowledge as a result of the project.
- The organization has benefited from the lessons learned by the team.

What is project management?

Many project teams work without any guidance on how to create a realistic and useful project how to monitor project how to respond to requests for changes in the plan. Project management project teams with a process that them coordinate their efforts so they may create the right product (or service, process or plan), at the right time, for the right customer, within the resource limits established by the organization.

Project management was once the exclusive job of project managers who most often coordinated the activities of specialized, complex, large-scale projects. In more recent years, however, role project managers and project management changing. The applicability of project management has to of a broad range, simple to very complex, and from manufacturing to and education and a host of other areas. Based on the success of the project management approach, the people

who lead and work on projects today are not necessarily trained project managers, and have a range of backgrounds and experiences.

While project managers still have an important role to play, all the members of a project team are expected to understand, participate in, and carry out a project by performing project management activities. This book is intended to support this new role for project teams.

How does project management help project teams?

There are many advantages to using project management. These advantages may be better illustrated by listing the pitfalls of NOT USING project management. Here are some of the typical problems that project teams experience when they DO NOT USE a project management process:

- Excessive work loads for some individuals
- Cost overruns
- Team members lack the right or expertise for the project
- Staffing conflicts with other projects or assignments
- Relationships among team members are strained
- The scope of the project keeps changing
- Work is redone or duplicated
- Resources are insufficient
- Deadlines are missed

Your project team doesn't have to get trapped in these pitfalls! This Memory Jogger™ describes a simple, easy-to-use process for managing projects all teams can use to avoid typical problems and pitfalls, and that will help them to create project outcomes every time.

Plan the Journey

Before you start the journey, take some time to review the key terms that you will encounter along the way. The terms that are critical to your understanding of the key concepts in this book are explained in the legend below.

A Legend of Key Terms

Key Term	Definition
	Products, services, processes, or plans that are created as a result of a project. A final deliverable is delivered to the customers of the project. An deliverable is produced during the process of creating the final deliverable.
Scope	A description of the project that includes information on what deliverables will be created and what criteria customers will use to judge not the deliverables meet their needs and requirements.
Resources	time, effort, and money. Is itored a project schedule. effort is measured in time, and money is allocated with a budget.
Risks	The for problems to in the process of creating the final deliverable.
Sponsor	The person who acts as between management and person is responsible for the project charter.
	A smaller the main A subproject team is when a subproject requires more than one person to do the subproject work.

Who *will* be making the journey?

The beginning of the project management journey is led by the project sponsor. It is the sponsor's to the project and to a project charter. When the charter is complete, the sponsor passes baton, and the project **team** takes the lead. The key of the sponsor and the project team are outlined in the **below**.

Key Project Players and What They Do

Project Players	Project Phases			
	Create Charter	Create Plan	Execute & Modify Plan	Complete Closeout
Sponsor				
Team Leader				
Team Members				

=Accountable for successful completion =Needs to be kept informed

=Should collaborate

Project Sponsor

The sponsor is a liaison between management and the project team. His or her role is to initiate the project by creating a project charter (Chapter 2). The charter forms the foundation of the team's planning process. If the sponsor does not complete the charter, then the project team must create it and get it approved by the sponsor.

In addition, the project sponsor:

- Ensures that the project is consistent with organizational objectives
- Helps the team overcome obstacles encountered during the project

Project Team

After the project charter has been created and approved, the team is formed and meets for the first time to agree on the rules and guidelines that team members the 3). The next step is for the team to a (Chapter to execute the plan (Chapter and as a last step, to close out the project 6).

There are two key types of roles for the members of any project team:

Project

- Facilitates the team process
- Collaborates with the team to create and execute the project plan
- Acts as the liaison between the sponsor and the customer
- Monitors the progress of the project

Team Member

- Ensures that his or her part of the project work gets completed on time
- Acts as a liaison with his or her supervisor
- Communicates back to the team on issues
- Monitors the progress of the subproject

Which *route will the team take?*

Some projects are small and focused, which require very little formal planning activity. Other projects are large and complex, which require considerable coordination between the different groups involved in the project. These large projects require more extensive project plans.

If your team **isn't** sure which planning activities **will** best fit the project, use the table below as a tool for **planning** route. Review the characteristics of each project type, then choose the one that fits your project. that each project **type** has a corresponding **key** icon. In Chapters 2 through *6*, look for the **key** icon that is for your project. **If** your **key** icon is on the **it's** an activity your team should do. you your key icon, your team can **that** activity and go to

Identify your project type

Project characteristics	Project Type		
	Type 1	Type 2	Type 3
When is the work done?	Mostly during team meetings	Outside team meetings	Outside team meetings
Who does the work?	Project team members	Project team members	Subproject team members
Typical examples	• Process/quality improvement projects • Reengineering projects	• Small scale, new product or process development and installation	• Large scale, new product or process development and installation

If you're not sure which generic type **your** project, assume have a type 3 project, but skip the specific activities that don't apply to your project. help you decide which activities to do or to skip, we've **included** a matrix of "Recommended Activities for the **Types**" on page and provided descriptions **of** the activities in chart at beginning **of** chapter. Review the matrix or the chart to see which activities are recommended for your project.

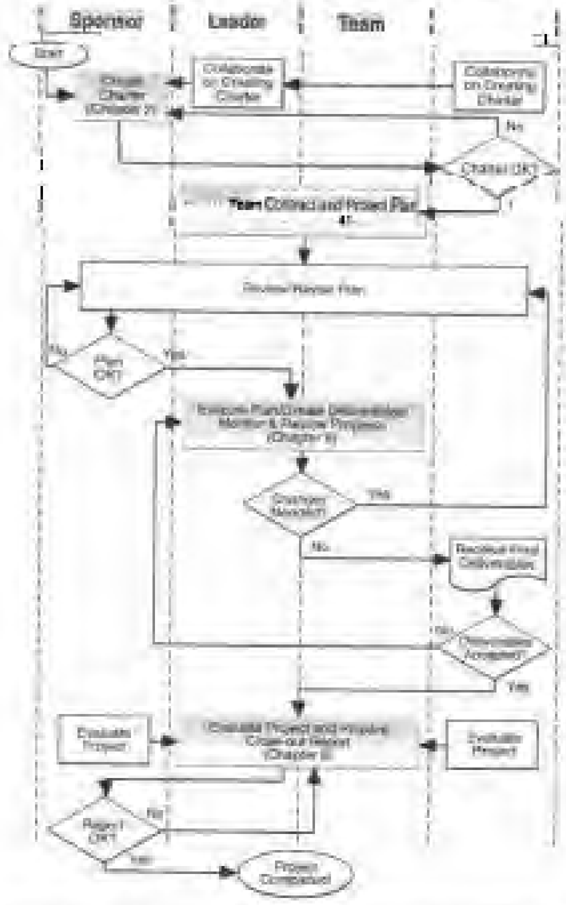
What are the important for your team's Journey?

sequence of **tasks** that a team must complete, the project through close out, is essentially the same for the is simple or involves a few people or many people. projects can take various paths within each these major tasks based on the scale or complexity of the project. What's important is to do more and no less than is required the project what YOUR project requires.

The on the next page charts the course any project. The signposts point you to the details of each chapter so that **you** and your team can move toward your final destination: a project!

A Project

Project Management at a Glance



Chapter 2

ow to Create a Pr Charter

The charter is a document that conveys the purpose and requirements of the project to the project team—the "who," "what," and "why" of the project. The chart below shows the basic parts of a charter. A key term to know is "deliverable." A deliverable can be a product, service, process, or plan; for example, a design package, a sales meeting, a plan for a process redesign, or a product prototype. Anything produced for the customers of the project is a "final deliverable." Anything produced along the way is an "interim deliverable."

It is the responsibility of the sponsor to create the project charter. If the sponsor does not create a charter, the project leader, in conjunction with the team, must create it and have it approved by the sponsor.

When you need to:	Do this activity:	Page
what the ... mer expects from the project	an ... of the Project Scope	
where the ... ject starts and	the Team's ... for the	18
what the ... are ... to project	Define the Customers' Criteria for Acceptance	21
Decide who must be involved in the ... and approval process.	the ... Approvals	22

Continued on next

When you need to:	Do	
the ... in doing the	Establish	24
who must ... on the team for project to succeed.	the Project Team Members	28
a date for the ... be ... customers	Set Delivery of the	
the amount of money or ... that can ... to project	Set Limits on	30
monitor and ... progress of the	Create a	32
Include ... and clarify the ... the project	Identify Organizational ... Project	34
Assemble the ... and distribute it to key	Assemble the Project Charter	37

ATTENTION:
Every project needs a charter! If the sponsor doesn't provide it, create it and get it approved.

Write an Overview of the Project Scope

Why do *it?*

To describe the objectives, deliverables,and customers of the project, as well as the customers' expectations for the final deliverables. If team members have a clear understanding of the project scope, they will be better able to satisfy the customer.

How do I do *it?*

1. Briefly describe the purpose of the project.
   - Limit the description to three sentences or less.
2. Give the project a name.
   - Choose a name that reflects the purpose or the anticipated final deliverableof the project.

Purpose: To d a day in the week of September project leaders, managers, project team members, and others who work on projects.

Project name: 3-Day Conference on

3. Identify the customers of the project.
   - Identify who will use the final deliverablesof the project. Who will receive the products, services, processes, or plans that are as a result of the project?Theseare the customersof the project.

The conference attendees are the customers of the 3-day conference on project management.

4. Define the customers' needs and requirements.
   - Determine what problem the customer wants to solve by using a specific final deliverable. (Customer need.)
   - Find out if the customer is looking for specific features in the final deliverable, or has defined specifications for the deliverable. (Customer requirement.)

The sponsor **not** *know what the needs and requirements customer are, so the sponsor may delegate this to the project team.*

Project **Overview**

Project name: 3-day on management

Customers' needs:

and better manage projects.

2) Make contacts with other who are project management.

One of the requirements:

address all of management

5. Identify and list the final deliverables of the project.
   - A final deliverable:
     - Is a product, service, process, or plan.
     - Must satisfy customer needs and requirements.
     - Is delivered to the customers of the project.
   - A project usually has only one or two major deliverables

there in which final deliverable will best satisfy the cu needs instruct with customer if p final deliverable choice.

If a project team will be producing a product and a process for delivering the product, the activities that must be completed to produce the product will be different from those for producing the process. The product and process (for delivering the product) are two different final deliverables.

Final deliverable: the conference on project management

6. Define any deliverables that must be created for the organization.
   - Do not include any deliverables be created for an outside customer. (This was done in step 5.)
   - A deliverable for the organization is a product, service, process, or plan that is created to meet an organizational need or requirement, not a customer need. These deliverables are byproducts or additional deliverables of the project.

     A deliverable that is created for the organization and delivered to the sponsor is called an organizational deliverable.

     Example: a report on a new area of technology that a team used in its production of a final deliverable for a customer.
7. Define any additional organizational goals for the project that are not deliverables.
   - Some examples of organizational goals that are not deliverables are:
     - To generate a specific amount of savings as a result of a reengineering project.
     - To enter into a new market or technology.
     - To use the project as an opportunity to train team members.

Organizational Deliverable and Goals for 3-Day Conference

Organizational deliverable: "Project Management Process Evaluation Report"

team members of the 3-day conference project will project management process that the has recently adopted and their experience in the report.

goal: Attract at least 300 attendees to the

Determine the Team's Boundaries for Creating the Deliverables

Why do it?

To define the start and end points of the team's involvement in helping to create the product, service, process, or plan, so that the team does no more and no less than is required.

How do I do it?

1. Determine the stage where project team members will begin their work, and the stage in which their work will end.
   - The table on page 19 shows that there are five generic stages in the development of any product, service, plan, or process. These stages are called "life-cycle stages."
   - In general, the life-cycle stage where a project ends determines what final deliverable is produced.

Life-cycle stage boundaries need to be defined for each final deliverable.

   - The word "boundaries" applies to the starting and ending points for creating each final deliverable.
   - The creation of any product, service, process, or plan will move through all of the development stages, from concept to delivery, and eventually to retirement, BUT a single project team may not be responsible for all of the stages. The project team may be responsible for one, some, or all of the stages.

   It is the sponsor's responsiblity to tell team members where their boundary of involvement begins and ends for each final deliverable.

Generic Life-Cycle Stages of Creating a Product, Service, Process, or Plan

Life-	Stage of	[illegible]
1	or definition	or that the address. the of the deliverable.
GATE		
2	or plan	Design, plan, document each and or test the or plan
GATE		
3	Test or	Test prototype. Pilot and plan and process. Train a facility.
GATE		
4	Produce or	Fully plan. Produce and product the customer. to customer. Operate process al.
GATE		
5	Retire	Return (people, to the or reuse materials.

Your organization may already have its own life-cycle stages. If so, use those instead of the generic stages described here.

- At the end of each life-cycle stage is a "gate" or checkpoint. The gate acts as a reminder for team members to stop and make sure they have completed all of the necessary activities before they move on to the next stage.

Also determine the boundaries for deliverables created for organization. For the conference work on Evaluation Report" starts ends stage 2, -Design or 'Inn

In proje concurrent engineering, different deliverables may be at different life-cycle stages. For example, the development of the process will usually lag behind the development of a product.

Improvement projects usually begin at life-cycle stage 2. Reengineering or redesign projects begin at life-cycle stage 1.

The boundaries the 3-day project begin at stage (creating the concept for the conference), and end at life-cycle stage 5 the

Define the Customers' Criteria for Acceptance

Why do it?

To tell the team what criteria the customer will use for judging the acceptability of the final deliverables. Knowing this helps the team create final deliverables that meet the customers' standards.

How do do it?

1. Determine the customers' criteria for accepting the final deliverables.
   - Ask customers for criteria, whenever possible.
   - If it isn't feasible to ask customers what criteria are most important to their satisfaction with the final deliverable, make the best possible decision on what the criteria should be.
   - Determine a way to measure the customers' level of satisfaction with the final deliverable.

The sponsor should also define his or her own criteria for accepting each organizational deliverable.

Measure for Judging level of
attendees be
to evaluate, on a of conference
quality of the networking
An of at a
the conference has met
and it is a success.

Determine the Required Reviews and Approvals

Why do it?

To identify who is responsible for providing review and approval for the interim and final deliverables. Reviews help the team to detect problems or concerns with the deliverables (interim and final) and to avoid or decrease any rework that results from not discovering potential problems early in the project.

How do I do it?

1. Make a list of the deliverables (interim and final) that require review or approval.
   - Identify who will provide the review and approval for each deliverable.
   - Note the reason why the deliverable should be reviewed or approved.
   - Depending on the project, it may be beneficial to also include customers in the review and process. For example: If the project is to improve an internal information system, the customers (potential users) may provide review and probably approval at certain stages in the development of the information system.

it's people want in the review approval process if doesn't each review requirement to it will improve the quality of the deliverable. This will save time and effort for the project team.

The will create their own list reviews when they create a project plan. The sponsor should concentrate on listing the reviews for management and project customers.

Don't forget to include any reviews and approvals that are needed to produce an organizational deliverable.

Reviews Required
for the 3-Day Conference

Interim Deliverable	Review	Approval	Reason
Final program	Sponsor	Sponsor	To make sure the final meets the needs.
Hotel contract		Sponsor	To review
Conference plan	Sponsor	Sponsor	To make sure the have been worked

Note: The customers of the project, the conference attendees, do review or of the the project. the customer will be solicited market surveys.

Establish Risk Limits

Why do it?

To define the maximum degree of risk that the team should allow in its production of the final deliverables. These risk limits help the team to develop corrective or preventive measures for the final deliverables that have an unacceptable degree of risk to the organization.

How do I do it?

1. Assign a limit for the maximum degree of risk that the organization is willing to accept for each final deliverable.
   - This risk is the uncertainty of not being able to physically produce the final deliverable according to the criteria set by the customer–of not having the ability, skill, or technological knowledge to create the final deliverable as promised. It does not include the risk of not having the needed resources, such as time, people, or money, to create the final deliverable.
   - Using a scale from 1–10, assign a number to represent the risk limit for each final deliverable.

     1 = an extremely low degree of risk or risk-free

     10 = an extremely high degree of risk
   - Where possible, provide an explanation as to which types of risks are acceptable and which are not.

Rating Scale

$$\underbrace{1\quad 2\quad 3}_{\text{Low risk, Low uncertainty}}\quad \underbrace{4\quad 5\quad 6\quad 7\quad 8}_{\text{Moderate risk, Moderate uncertainty}}\quad \underbrace{9\quad 1\quad 0}_{\text{High risk, High uncertainty}}$$

the sponsor sets an unnecessarily low
may need add activities to schedule and
or money in the budget. The be longer
project that costs more n risk at
the highest level that is acceptable to the organizati

to assign a each final
deliverable being created for the organization.
to organizational goal. For example,
sponsor for the 3-day conference assigned a
of 1 to organizational goal of attracting
paid attendees to the conference, which is critical to
the profitability of the conference, a risk limit of 2
the deliverable of creating
Management Process Evaluation

Risk **Limits for the 3-Day**

The sponsor the conference a risk
2, and has the team to
minimize **any** that the not
satisfy the needs expectations the

Select the Project Leader and Team Members

Why do it?

To make sure that the project team includes the right people with the best blend of skills, influence, and knowledge and is led by a capable leader. Choosing the right team makes it easier for the project team to meet its objectives.

How do I do it?

1. **Assign a project leader.**
   - Look for someone who is skilled in these areas:
     - Leadership
     - Facilitation
     - Coordinating tasks
     - Communication
     - Project management knowledge
   - The project leader should be a key stakeholder. A key stakeholder has a strong interest in making the project succeed because he or she (or the area she represents) is affected by the activities or deliverables of the project.

Amy Lee is a key in 3-day and has herself a successful project leader. She is the **project leader of choice for the 3-day conference.**

2. **Select the members of the project team.**
   - Consider the types of skills, knowledge, and expertise that are important for the project.
   - Although all key stakeholders should be considered for membership, they don't necessarily need to have regular membership status (attend all team meetings). Some can be ad members (attend team meetings when their presence is required) and some can be kept informed of the progress of the project through reports and meetings with the team liaison.
   - Usually, the smaller the size of the team, the better.

Consider including customers and/or a key supplier to maximize customer satisfaction and/or the quality of the final deliverable.

Selecting the team for the **3-day** conference requires subproject teams, which means it is a type 3 Work area have been selected to the team and will lead subproject teams own

Project Team	Work Area
Jose	
Andy	
Panetta	Print
Linda	Member
Amy Lee (Project Leader)	New product development

Set Deadlines for Delivery of the Final Deliverables

Why do it?

To set a time limit on when each final deliverable must be given to the customer. It is important to set a deadline at this because it allows the team to create a schedule that fits within the time boundary for the project.

How do I do it?

1. Determine when the final deliverables must be delivered to the customer.
   - The team will build the project schedule around these dates.

Deadline for the final deliverable: The 3-day conference be held on September and 29. Market surveys that were taken helped to determine that the customer prefers this of year for attending the conference.

2. Record any other deadlines that apply to the project.
   - Are there any other deadlines that must be met, such as deadlines for completing any of the cycle stages? For completing the project plan?
   - Record only critical deadlines that, if not met, will have a significant impact on the project.

giving too deadlines, the job to plan how to reach deadlines for

Don't forget to set *any organizational deliverables that are required for your project.* *sponsor* *3-day conference wants the "Project Management* *the Evaluation* *issued* *December 31.*

Additional deadlines for the 3-day conference:

The sponsor wants the conference plan by **August**

Set Limits on Staffing and Spending

Why do *it?*

To convey the limits on the amount of staff time and the amount of money that the organization will agree to commit to the project. Knowing these limits will help the team to define staffing and spending budgets that are in sync with the amount of money the organization is willing to provide to support the project.

How do I do it?

1. **Define the limit for how much time the staff can devote to the project.**
   - This limit applies to internal staff time only. It does not include outsourcing. Outsourcing is an external cost. See Step 2 on the next page.
   - Staff time can be expressed in hours, weeks, months, or years.
   - Some alternative ways to express staff time may be:
     - "No more than 20% of people's time."
     - "One day every two weeks for three months."
     - "One two-hour meeting once a week."

The **conference** has a high the so the sponsor put a on the of staff that can be devoted the project. the would like the team to estimate the work hours required and then monitor the actual hours invested.

2. **Define the spending limits for the internal or external costs that will be expended during the project.**
   - Internal costs = cost for staff time and other internal charges, supplies, copies, equipment
   - External costs outside purchases, contract labor, equipment

Make sure *time* *spending realistic;* *should* *the team adequate resou* *to create* *required deliverable. Don't expect 100% res* *with 50% of* *needed resources!*

If a goal *project is* *produce savings, for* *as* *process improvement project, or* *profits, this is considered* *of the organization* *page 78 for* *of*

Limits for **3-Day** Conference

There has asked instead that the the internal and then actual spending costs

Create a List of Required Reports

Why do *it?*

To tell the team what reports are required by management so that the progress of the project can be monitored. These reports help the team to monitor their own progress, provide information to the sponsor and customer, and keep the project on track.

How do I do *it?*

1. Create a list of all the reports that are required to monitor the progress of the project.
   - The team will create a list of reports to help monitor its own progress. The sponsor needs to specify the reports that management needs to monitor the status of the project.
   - On the list, include the following:
     - Type of report
     - Person requesting the report
     - Date required or frequency
     - Content of the report

effort so *ask for* *that are necessary to keep the* *on* *reports where* *to do so.*

Reports Required for the 3-Day Conference Project

Type of Report	by	Date or Frequency	Content
Progress Report		Weekly	and variances
Tabulation	Sponsor	One week before contract deadline	Comparison of vers hotel deliverable
Speaker List			list of people

Identify Organizational Constraints and Project Priorities

Why do it?

To identify any organizational constraints that must be imposed on the project and to assign internal project priorities. Organizational constraints and priorities enable the team to create final deliverables that reflect the special needs of the organization.

How do I do it?

1. Identify any constraints that the organization will impose on the project.

- Constraints are limitations placed on the project such as "No unscheduled equipment downtime," or "No additions to head count."

Avoid on the project unless they are absolutely Give the team path resistance, the freedom & creativity in executing project.

on 3-Day Conference

No staff can

2) No purchases.

3) Only services can be

2. Consider which factor—lower cost, earlier delivery, or more features for the final deliverable—is the highest improvement priority for the project, and which factor is the lowest improvement priority.

- As a baseline, assume the project will meet the deadline, the spending limits, and the customers' minimum criteria for acceptance. As a way to improve on this baseline, consider which lower cost, earlier delivery, more features—has the improvement priority for the project, and which factor has the lowest improvement priority.
- Give a rank of 1 to the highest priority, a rank of 2 to the next highest priority, and a rank of 3 to the lowest priority.

Cost, *delivery, and features are in . For adding more features will usually increase costs. Earlier delivery can be achieved with more money or fewer features. Project teams often have to make decisions on how to balance these three factors. The sponsor should define the relative priority of these factors so that the team can make decisions on trade-offs during the project that are in line with the organization's priorities.*

Improvement Priorities the 3-Day Conference

"Lower given the highest priority conference a profit-for the organization

is given the second ty qual standards for conference are high and more will not of the for the

"Earlier is the Improvement because there is no advantage the any earlier than the scheduled date.

	Rank
Lower cost	
More	2

Assemble the Project Charter

Why do *it?*

To create a document called the "charter" that details the customers' and the organization's expectations for the project. The charter sets the requirements and the limits for the project and forms the basis for creating a detailed project plan.

How do I do *it?*

1. Assemble the charter using the following four divisions:
   - Project Scope: Describe the scope of the project, including: the project objectives; customer needs and requirements; each final deliverable with its life-cycle boundaries and customer acceptance criteria; each organizational deliverable with its life-cycle boundaries and sponsor acceptance criteria; any organizational goals for the project; and the reviews and approvals required for the project.
   - Project Scope Risk: List the risk limit for each *final deliverable* for the project, and the reason for the limit. Also list the risk limit for each *organizational deliverable,* and the reason for the limit.
   - Project Resources: Define the resource limitations (deadlines, staffing limits, cost limits) and priorities of the project. List the team assignments.
   - Project Status Reports: List the reports that will be required by management to monitor the status of the project.

information in ... charter ... beautiful project ... members in efforts to create an effective project plan. The more direction ... have front, the less time it will take them to complete a project plan that is in line with the needs and expectations of the organization and project customers.

2. If required, get the charter approved.
   - The sponsor may need to have the customer and/or the project steering group approve the charter.
   - If the project team completed the charter, the project leader will need to review it with the sponsor, make whatever modifications might be needed, and then have the sponsor approve it.
3. Issue the charter.
   - Distribute copies of the charter to:
     - Project sponsor
     - All members of the project team (both regular and ad
     - Functional managers who will be affected by the project
     - The customer, where appropriate
     - The project steering group or project office
     - Anyone else who has a stake in the project

Project Charter

Prepared by: Chris Wheeler, Sponsor
and Amy Lee, Leader

Date issued:

Project name: Day conference on Project Management

Project Objective

day conference on September ... through ... for project leaders, sponsors, functional managers, team members, others who work on

Project Customers

Conference attendees.

Customer Needs

knowledge and ... better manage projects
make contacts ... other people who are practicing project management.

Customer Requirements

There ... be a ... of general interest ... and

At ... two hours ... day should be devoted to ... networking

Final Deliverable

3 day conference on project management

- **Life-Cycle Stages**
  Start at stage ... Create concept for conference.
  End at stage ... Deliver ... conference.
- **Customers' Criteria for Acceptance**
  ... the conference ... the conference ... and the networking ... all need to ... of at least ... out of a possible 5, for the conference to be considered a success from the

Page 2 of 4

Charter for the 3-Day Conference

Organizational Deliverable

"Project Management Process Evaluation Report."

- **Life-Cycle Stages**
  Start and end at ... Create the report.

Organizational Goal

At least 300 paid attendees

Reviews and Approvals Required

Interim Deliverable	Review		Reason
Final program	Sponsor	Sponsor	To make sure the final ... meets the customers' needs
Hotel contract	Sponsor	Sponsor	To review bids.
Conference plan	Sponsor		To make sure all the ... have been worked out.

Project Scope Risk

Risk Limits

Successful ... conference: ... of 2
300 paid ... limit of
Project Management Process ... Report: of 2

Rating Scale

1 2 3 4 5 6 7 8 9 10

Low
Low uncertainty

Moderate risk
Moderate

High
uncertainty

Note: The rating scale in the example above is not normally included in the project charter. It is shown here only to illustrate to readers the level of risk that is associated with each number.

Page / of 4

Charter for the 3-Day Conference

Project Resources

Team Assignments

Project Any (New Product Development)
Team: Grace (Facilitator)
Andy
Ralph Panetta (Print Shop)
Linda (Member)

Organizational Priorities

cost
features
delivery (Since the conference will not be held than the end of September, this is not a

Organizational Constraints

No additional staff can be hired.
can be purchased.
Only services can be

Deadlines

The conference must be held September 27-29.
report on the project management process is due on December 31.

Staffing Limit

The team should estimate the amount of time the project and then monitor the actual

Limit

The for external costs is

Page of

Charter for the 3-Day Conference

Status Reports

Reports Required

Type of	Requested by	Date or Frequency	Content
Report	Sponsor	Weekly	Budget and schedule
Hotel Bid	Sponsor	One week before hotel contract deadline	Comparison of costs versus hotel
Speaker List	Sponsor	Weekly	Current list of people

Chapter 3

How to Work as a Team

At the first meeting, team members need to agree on a basic set of guiding principles or ground rules for running meetings, participating on the project team, and resolving conflicts.

The team also needs a way to capture ideas and issues mentioned during a meeting that cannot be dealt with immediately. (Ideas belong in the "parking lot," and issues, items that require an action, belong on the issues list.)

Every project team should complete all of the activities in this chapter.

Commit to the Project

do it?

To get agreement within the team on the level of commitment that each team member will be making to the project.

do I do it?

1. Discuss the commitments listed below. Add to, remove, or modify the items as appropriate for your team and the project.
   - Only commit to do work that we are qualified and capable of doing.
   - Be honest and realistic in reporting the progress of the project.
   - Be proactive.
   - Notify the and/or the sponsor of any change to the project plan that may affect them.
   - Follow through on our individual commitments to the team and accept responsibility for our actions.
   - Keep other members informed of any potential problems that may affect the team's performance.
   - Focus on what is best for the project as a whole.
   - See the project through to successful completion.

After everyone has to list each should sign the list, indicating he or agrees to the commitments.

Develop Team Ground Rules

Why do it?

To establish ground rules that will help team members recognize and use appropriate behavior, which will result in meetings that are more productive, open, and ultimately more fun.

How do I do it?

1. **Establish ground rules for team behavior.**
   - Consider meeting discussions confidential unless indicated otherwise.
   - Listen openly to other people's points of view.
   - Encourage a divergence of opinions on all topics.
   - Allow everyone the opportunity for equal participation.
   - Help keep discussions on track.
   - Avoid placing blame on someone when things go wrong. Instead, review the process and discuss how it could be improved.

It's often helpful for the to post the list of ground rules at each meeting.

2. **Agree on how team members will give and receive feedback.**

   When you are giving someone feedback:
   - Give constructive feedback.
   - Don't judge or label the other person; describe a specific behavior or incident.

When you are receiving feedback:
- Listen carefully to the other person.
- Try to understand the other person's point of view.

For The Memory ogger™ pages brief summary team guidelines, to The Jogger™ pages 150–155.

3. Adopt a set of guidelines and techniques that will help the smoothly through the solving process.

   For brainstorming sessions:
   - Encourage everyone to participate.
   - Never criticize ideas.
   - Think of ideas that are unusual or creative.
   - Come up with as many ideas as possible in the time allowed.
   - Build on other team members' ideas.

   For problem solving and planning:
   - Always use data (to the degree possible) or consensus, where necessary.

to Memory Jogger™ to find instructions for using both tools, (e.g., Pareto, Histogram), and consensus-based tools, (e.g., Affinity, Tree).

Determine Meeting Guidelines

Why do

To agree on how team meetings will be structured and what procedures the team will use to keep meetings on track.

How do I do it?

1. Agree on the basic structure for team meetings.

   Add to or modify the items listed below, according to team member suggestions.

Meeting Structure

- Project will be held two weeks, month.
- will be called b y (a person).
- **Agendas** be issued (a in advance.
- Meetings and end on time.
- scribe issue within of the

Meeting Procedures

- the project leader to facilitate team meetings.
- Follow the agenda.
- Add unresolved issues to the issues list at every team meeting. For each issue, assign someone to resolve it and set a target date for completion.

- Make sure that any team member who cannot attend the meeting sends a representative or her place. The representative should be well prepared and have some authority to make decisions.
- Rotate meeting tasks. (These tasks include taking meeting notes, making room setting up the room, etc.)
- Propose topics or items to include on the agenda for the next meeting.
- Evaluate each team meeting. *Did we meet our objectives? Did we follow our own guidelines? Did we follow the agenda?*
- Use data- and consensus-based, decision-making tools in team meetings.

Force is helpful tool in feedback the end of ting. (See pages 63–65 in The ory II.)

Record the team's i that whole can view the ideas together. (Or tape a piece of butcher paper to the wall.) If someone has a misunderstanding it's enough to refer to the ideas on the flipchart paper.

Create a "Parking Lot"

Why *do it?*

To capture ideas that don't fit the task at hand but are important to save for future review.

How do I do it?

1. Write ideas on Notes and place them on flipchart paper.

   The flipchart paper becomes a common storage area for ideas, as a parking lot is a common storage area for cars. Because of this similarity, this collection of ideas is called a "parking lot."

> *Recording ideas that aren't immediately relevant allows the team to move ahead and not worry about losing ideas that may be important to pursue at another time.*

Create an Issues List

Why *do it?*

To provide the team with a way to capture issues, items for action, as they arise, so they can be managed and resolved as the project moves forward.

How do I do it?

1. Create a form for recording the issues.
   - Design the form to include:
     - a number for each issue
     - a description of the issue
     - who wants the issue resolved
     - the person or group who is responsible for resolving the issue
     - the date by which it should be resolved
     - the date it is resolved
     - how the issue was ultimately resolved

> *If it's someone's belongs on list, it on a Post-it™ Note, it in the lot," and review it late decide it's really an action item.*

2. Review current issues at team meetings.
   - Include a review of current issues on the agenda for each meeting.
   - Resolve key issues before assembling the project plan.
   - When an issue is resolved, use issues list form to record the date and to describe how it was resolved.

> *The project leader is responsible for keeping a record of all the resolved and unresolved issues.*

Chapter 4

How to Create a Project Plan

A project plan is written by the project team and approved by the sponsor. It describes what the team plans to produce (the interim and final deliverables) and what resources are needed to produce it. Creating a good project plan makes it easier for the team to successfully execute the project.

The overview chart on the next page shows nine broad categories of activities that are typically needed to create a project plan. The activities for each category are listed in charts that are similar to the overview on the next page. Use the overview chart to locate these activity charts, then flip to the page you need.

specific activities that **your** team will need to work on depends on your is type 1, 2 or **3**. If your project **is** type 1 **or** 2, just some activities will need **be** completed. your project type 3, your team will need to complete **all** of the planning ties. To your team needs **an** activity, use these three methods: the "When you the charts and statements for each activity, and look for **the** key icon **that** represents your project. Check these landmarks and your team will have a smoother journey!

Before proceeding, determine your project type (see page

Legend of Key Terms on page 4 you encounter an term. deliverable" **is** defined on pages 16 and 55.

When you to:		Check the activities in the category:	Page
and be produced	➤	Define the Scope	53
Decide what need and approval who shou the ned		Complete the st of req	
Determine if there are potential to existing		Assess are Connected w the Project Scope	73
all the reports needed to monitor the project	▪	List of Required Project	78
Ask whether the right people been added on the team		Review Team Membership	82
the schedules completing		Create a Project Schedule	88
how much staff be needed and		Estimate the	112
much money will be is	-	Budget	121
Assemble the pr and get the appr		Plan	130

Define the Project Scope

The purpose of a project is to produce a unique product, process, or plan (a final deliverable) that will satisfy a customer or a group of customers. The project scope defines who the customers are, the final deliverables that will be produced for them, and the criteria that the customers will use to judge their satisfaction with the deliverables.

When you need to:	Do this activity:	Page
Make ... understands ... customer. be	Expand on the Project Scope	
the ... ption of ... into smaller, more manageable pieces	Determine What Deliverables Need to Be Produced	56
for ... where ... and where ... bility ... ends	What Processes and Projects Fall ... the Project Scope	61
and ... for each team member	Create a Tree of Subprojects and Work	64

Expand on the Project Scope Description

Why do it?

To make sure there is agreement between the project team, sponsor, and customer on what the final deliverables of the project will be.

How do I do it?

1. Make sure everyone on the team understands the "Overview of the Project Scope" section of the project charter.
   - This section of the project charter defines the following:
     - purpose of the project
     - name of the project
     - customers of the project
     - customers' needs and requirements
     - the final deliverables of the project
     - the organizational goals and organizational deliverables of the project
   - If the team does not understand the scope of the project as described in the charter, the team should ask the sponsor for clarification before moving on with the project.
2. Write a description of the final deliverables that will be produced by the project.
   - The charter identifies the final deliverables of the project, but it may not provide enough detail on the features of the final deliverables. It is the team's job to write a detailed description of the final deliverables so that the sponsor and/or customers have a complete picture of what will be produced.

team's ... scope ... include. In all of ... project planning activities should ... down ... flipchart or banner paper so ... team ... the elements of the plan as ... is created.

3. Define the customers' criteria for acceptance of the final deliverables.
   - Review the section in the project charter where the sponsor has broadly defined the customers' criteria for accepting the final deliverables.
   - Is the sponsor's list of criteria complete? If not, add the necessary detail about a specific criterion, and/or add additional criteria to the list.
   - The criteria should describe results that are important to the customer.
   - Where possible, make the criteria measurable.

The team will ... need to ... write ... description ... define the life-cycle stages for ... define ... sponsor's criteria for accepting ... each organizational ... that will ... produced ... project. ... an ... deliverable is a process, or plan that is created to meet an organizational need, not a customer need.)

The team also needs to review any organizational goals for the project that were defined by the sponsor, so that they may be incorporated in the project plan.

See page 16 for further clarification of organizational goals and deliverables.

Determine What Interim ... Need to Be Produced

Why do it?

To describe in detail the things that must be produced by the team, before the final deliverables are completed. These are the building blocks for developing the project milestones, schedule, and budget.

How do I do it?

1. Define the interim deliverables that will be produced for each final deliverable.
   - An interim deliverable directly leads to or supports the production of a final or organizational deliverable.
   - The team needs to define all of the interim deliverables that will be produced from the beginning life-cycle stage (for the deliverable) to the ending stage. For example, if a final deliverable starts at life-cycle stage 2 and ends at life-cycle stage 3, the interim deliverables that must be defined are those produced only in stages 2 and 3.
   - Use the generic life-cycle activity descriptions as clues to what interim deliverables are possible for your project. See the table on pages 57–58.
   - If your organization has its own life-cycle stages, use those instead of the generic example.
   - Check the "parking lot" and the issues list for ideas that might be interim deliverables.

To ... the ... think ... will ... should ... produced after that? Continue asking this ... team gets to ... deliverable.

Life-Cycle Stages and Interim Deliverables for the 3-Day Conference

This table shows the life-cycle stages, activities, and some of the interim deliverables for the 3-day conference. The team deleted the generic activities in the table that did not fit the conference.

Life	Stage of		Interim
1	Create or definition	the ... that the conference address. Define the ...ics of the conference	• Preliminary program
2	Design or plan	Plan, document the interim and ... the plan.	• Hotel contract • • Final • Conference and schedule (set up, workers, layout of facilities, room assignments, registration, tear-down)
3	Test or install	Train people. Install equipment.	• Speaker instructions • Trained conference workers • Equipment set-up
4	Produce or implement	Implement the plan fully. Provide service to customer.	• Conference proceedings • Audiotapes of sessions • Conference

Continued on next page

Life-Cycle Stages Table continued

Life-Cycle	Stage of Development	Stage Activities	Interim Deliverables for
5	Retire	Return resources (people, the ... recycle or reuse	• Equipment break-down • Conference materials to stock or recycled

Don't forget about defining the interim deliverables for your project organizational deliverables well. ... same that described in 7. For example, the organizational deliverables for 3-day conference team is "Project Management ... Evaluation ... the team's ... on this report begins and ends in life-cycle stage ... interim deliverables that need to defined are those that are related to the activities in stage only. The interim deliverables then defined "creating a ... and ... report."

2. Define the quality criteria for each interim deliverable if the interim deliverable could have a significant impact on the quality of a final deliverable.
   - Monitoring the quality of interim deliverables helps to ensure that each final deliverable will meet the customers' criteria for acceptance.
   - Where possible, make the criteria measurable.

a project delivered customers, too anything about quality. interim deliverables project team to respond to quality issues before the final deliverables go to the

Internal Quality Criteria for the 3-Day Conference

Final	Internal Quality
Conference on Management	• A rating of 4 or 5 given by of a focus group the topics selected for the conference. • A rating of or 5 for each conference based on an internal rating that evaluates prior speaker performance, speaker and on. least of all the sessions are included in the conference • Quality of 4 or 5 on an internal evaluation of speaker • At 2 hours per day opportunities during the three-day conference.

to criteria for interim deliverables that could have significant impact the quality of the organizational deliverables. The conference, the team determined internal quality were needed for the ... deliverable, "Project Management Process Evaluation Report

Determine What Processes and Projects Fall Within the Project Scope

Why it?

To identify where the team's responsibilities for the project start and end. Projects tend to intersect and overlap with other activities in the organization. The team needs to know the activities included in the project scope and those that are excluded.

I it?

1. Identify the processes that are part of the project scope.
   - A process is a set of steps or activities that allows a person or team to produce the same outcome, with minor variations, every time the process is applied.
   - The project scope is a description of what interim and final deliverables will be produced.
   - Review the project's interim and final deliverables to identify the processes that will produce those deliverables.

3-Day Conference

The processes that are of project are:

- Contracting and facilities
- Marketing process
- and process
- Registration process
- Program development process

Don't forget to review the organizational deliverables of the project so that your team can identify the processes that will produce those deliverables.

2. **Identify any processes that will significantly affect the project or that will be significantly affected by the project.**
   - Do not include processes that are part of the project scope. (Those identified in Step 1.)

The processes the team as outside project usually provide some into project, however, the is not responsible for out these processes.

The process that is affected by 3-day conference, but is not part of the project scope, is the:

- and order-taking

3. **Identify any projects that will significantly affect the team's project or that will be significantly affected by the team's project.**
   - What other projects, if any, overlap with your team's project? Could their activities or the deliverables they will produce get in the way of your team's project?

- What projects will be affected by your team's project, but are not the responsibility of your team?
- What projects will supply inputs to your team's project?
- Do not include projects that are part of the project scope. (Subprojects for example.)

very on the depth of your project The team should not involved in projects that need improvement, unless the sponsor approves this involvement.

Watch out for other projects that are working on producing deliverable that directly affect your project team's activities. If a another is fixing a procedure for using purchasing cards and your team has been to redesign (renewal system their purchasing deliverable) have a way on your project is the from the to participate your the on to two projects.

3-Day Conference

project that is affected but of the scope

Membership

Create a Tree Diagram of Subprojects and Work Assignments

Why do it?

To divide up the work of the project and to assign that work to subprojects. The tree diagram shows at a glance what subprojects will be carried out and which people will be held accountable for making sure the work assignments are done. Subproject members then convert the work assignments into their own project plans.

How do I do it?

1. Create a list of subprojects.
   - A subproject represents a chunk of work that will be overseen by a project team member.
   - Subprojects should be aligned with the way the organization breaks down work (work unit).
   - Processes that are part of the project scope represent natural work breakdowns, so using the list of processes is a good starting point for determining subprojects.

     your organization breaks down work by function, geographic location, or by business unit, use these distinctions as starting points for determining subprojects.
   - Subprojects may also include the boundaries of the work unit. The subproject team representative or leader will be responsible for coordinating that work with other work units.

probably be important for project Management include the reports deliverables will be by the project as a whole, and any items that subproject.

2. **Create a tree diagram of subprojects.**

- **Write the name of the project on the side of a piece of flipchart paper, positioning it so that you have room to expand the diagram from left to right.**
- **On the first tier of branches write of the subprojects.**

3. Assign a team member to lead or represent each subproject.
   - The person who is asked to lead or represent a subproject will be accountable for ensuring that the deliverables for that subproject are produced on time and within the limits and constraints determined for the project.
   - Add the name of the person accountable for each subproject on the subproject branch. Only one person can be accountable for each subproject.
   - The project leader will be accountable for the "Project Management" subproject.

the project is type 3, each who is accountable for subproject need other people the subproject deliverables therefore become team subproject leader needs to work the subproject members to create subproject type 2 project, person who is accountable for doing most work solo, and he or she will not be leading a subproject team. This person to be successful in completing the subproject work, it's a good idea for this subproject representative to create a plan for his or her own subproject work and to review it with the project team.

4. Define the deliverables that each subproject will produce.
   - Each subproject leader or representative should identify what deliverables the subproject will produce at the end of the subproject. These are called final subproject deliverables.

- Write the names of the final subproject deliverables on the next branch to the right of each subproject.
- If team members are having trouble defining what final deliverables each subproject will produce, they can brainstorm possible deliverables, placing each one on a Post-it™ Note. The team should ask, "Is this a deliverable that will be produced at the end of the subproject process?" If it is, place the Post-it™ Note next to the appropriate subproject. If it isn't, put it in the "parking lot" for possible use in future steps.

Don't forget assign deliverable to a subproject. Most commonly they fall the "Project Management" subproject.

5. Review the list of interim deliverables for the project and make sure that each one is included in a subproject on the tree diagram.

produced by project whole, place if "Project Management". These interim deliverables are lly produced as a result of several subproject activities.

3-Day Conference

The plan is an interim project deliverable does any the It is a synthesis the plans by each subproject. Note for "conference plan" the 'Project Management."

6. **Review the tree** diagram.
   - Are there any duplicate deliverables on the branches? If so, decide which subproject is most appropriate and remove the duplicates. If the same deliverable appears in more than one subproject, the team needs to determine who is really accountable for producing the deliverable. Determine which duplicate to keep by asking, "Who is the best person to ensure that this deliverable gets produced?" and then eliminate the others from the tree diagram.
   - Have any deliverables been overlooked? If so, add them to the appropriate subproject.

3-Day Conference

The graphic design and printing process is one of five processes are part conference

Initially, when the team was down the graphic design and was as a subproject. team down the Final the postcard, brochure, conference **program,** and conference

The **team** quickly realized, however, that the final graphic and were more under the subprojects called and "Program Therefore, the team "Graphic as a subproject.

Complete the List of Required Reviews Approvals

Most deliverables, either interim or final, have to be reviewed and/or approved before they can be delivered to the customer. Defining what reviews and approvals should be integrated into the project process allows the team to schedule and coordinate the review activities.

	to:	Do	activity:	Page
Expand on list	and approval charter		Complete the List of Reviews and Approvals	

Complete the List of Reviews and Approvals

Why do *it?*

To complete the initial list of reviews and approvals that was included in the project charter. The team may find in reviewing the charter that there are additional people on the team or in the organization who should be included in the review and approval process. By completing this list, the team can include these activities in the project schedule and thus make sure that they are coordinated and completed on time.

How do I do *it?*

1. Create a table that shows what reviews and approvals are needed for the project.
   - Include:
     - the name of the deliverable that needs to be reviewed
     - the person who will ensure that the deliverable gets produced
     - the purpose of the review
     - the names of those people who will provide review or approval
     - a column for the date the review or approval must start and the date by which it must be completed

and customer can potentially useful for building support for the project. They keep customers informed of progress.

Don't to include of approvals for organizational iverables of the project. Also include any interim organizational deliverables that might require review or approval.

2. Fill in the table with the relevant information from the project charter.
   - This information can be found in the "Required Reviews and Approvals" section of the project charter.

outside to participate reviews, publish the table early enough so they plan the reviews into schedules.

3. Determine if additional reviews and approvals are required.
   - Additional reviews and approvals can include team members, departmental managers, other outside stakeholders, etc.
   - Add the appropriate information to the table: what will be reviewed or approved, and who will do it.

Try to keep the number of reviews to a minimum. Question ich review requirement to make su 'll add to the quality of the deliverable.

The 3-day conference team identified some reviews that were needed in addition to those listed in the charter.

Reviews Approvals (partial) for the 3-Day Conference Project

Deliverable and Accountable	Purpose of	To by	Review Start and End Dates (Complete	Approval Needed
lee)	Content theme		E	None
(Amy Lee)	Consistency	project team	E	
conference plan (Amy Lee)	Consistency	team		None
brochure (Andy Watson)		Amy Lee	S E	None

4. **After the project schedule has been completed, add in the dates for when each review should start and end.**
   - The schedule of project activities includes the start and end dates for each activity that must be done for the project. This type of schedule is explained more fully on pages 102–109 in the section called "Create a Project Schedule."

As the connected with the Project Scope

Any project has some degree of risk. This risk is associated with the organization's ability to create deliverables that conform to the customer's criteria for acceptance. The risks that are discussed in this section include any that could prevent the organization from meeting the acceptance criteria. Typical obstacles include an inability to find the right people who have the necessary or expertise, and the inability to access the technological know-how that is needed to create the project (Obstacles in this case are not limitations related to time, people or money.)

When you need to:		Do	
the obstacles to	the final	Assess the Risk in Final	74

Assess the Risk in Producing the Final Deliverables

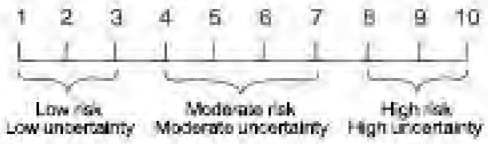
Why do it?

To inform the sponsor, and the customer when appropriate, of the degree of risk connected with the project scope, and the countermeasures that the team has developed, if needed, to bring the risks down to levels that are acceptable to the organization.

How do I do it?

1. Assign a risk rating to the team's ability to produce each final deliverable. List the reasons and assumptions for the risk rating assigned by the team.
   - Use a scale from 1–10 to assign the risk rating, with 10 as the highest risk, and 1 as the lowest.
   - A low risk rating (1–3) means there is a low degree of risk or uncertainty involved in producing the final deliverable according to the customer's criteria for acceptance.
   - A moderate risk rating means there is a moderate degree of risk or uncertainty involved in producing the final deliverable according to the customer's criteria for acceptance.
   - A high risk rating (8–10) means there is a high degree of risk or uncertainty involved in producing the final deliverable according to the customer's criteria for acceptance.

Rating Scale



its capability produce the final this the does need to whether or resources (time, needed to the final deliverables

2. Compare the team's risk rating to the limit defined in the charter. For each final deliverable that has a risk rating above the limit, create countermeasures to bring the risk down to the limit.
   - Brainstorm possible countermeasures that will reduce the risk. One method for identifying risks and countermeasures is to use a PDPC (Process Decision Program Chart). Consult The *Memory Jogger*™ pages 160–162, for instructions to use this tool.
   - From the brainstormed list of countermeasures, select those that will bring the team's risk rating down to the limit. If a limit was not set by the sponsor, bring the risk rating down to a level that is acceptable to the team or get clarification from the sponsor on what the acceptable level of risk should be for each final deliverable.
   - If the team cannot bring the risk rating down to the limit, this issue should be added to the issues list and the project leader should resolve it with the sponsor.

is easy bring rating level lower than limit—without adding such money or effort—the team should go ahead and do However, if additional would involved, part countermeasure(s) issues then discuss with

to assess deliverable e- organizational compare the rating the sponsor's limit. If the above countern to reduce the

Risk Rating Versus the Limit for the 3-Day Conference

or Goal	Team's Risk Rating	Reason for Risk	Risk
Conference	3	are hard to find.	2

bring the down to sponsor's limit)

1. Offer to publish selected papers in a magazine.
2. Consider an honorarium for speakers.

3. **Assign a person to be accountable for each countermeasure that is chosen.**
   - **The person must be a member of the project team.**
   - **The person who is assigned to a countermeasure is accountable for making sure it is carried out correctly.**

Person Accountable for Countermeasures Chosen for the 3-Day Conference

Final ble	Countermeasures Chosen	Accountable
	to publish in a monthly	Amy Lee, Program Development,
	Consider an honorarium for speakers.	Amy Lee, Program Development

any changes that could with your such changes in scope or changes environment, i.e., organizational, regulatory, competitive, and technological changes. If these do your need to reassess countermeasures were developed for your

Complete the List of Required Project Status Reports

is for the project team members, the sponsor, and customers—to know how the project is progressing. This is accomplished through progress review meetings and project status reports. (These review meetings are described in Chapter 6, How to Out the Project.) Status reports describe the progress the is making in getting the deliverables produced, in staying on schedule, and in meeting the staff time and spending expectations that are described in project plan. These status reports will problems that are occurring, or have the potential to occur, with the production of the deliverables, or in trying to in the schedule or the budget.

When you ed to:	Do this
made of the creating the and the	Create a Complete of 79

Create a Complete List of Project Status Reports

Why do it?

To keep everyone informed on the progress the team is making in producing the project deliverables or in spending the organization's resources. These reports provide an update for the team, the sponsor, and the customer on the current status of the project.

How do I do it?

1. Create a list of the reports that will be required to monitor the status of interim or final deliverables.
   - On the list, include the following:
     - Name of the report
     - Person who is accountable for the report
     - Date required or frequency of the report
     - People who should receive the report
     - Content of the report
   - Include reports that were requested in the charter.

team is time into schedule in these reports.

Also include progress status reports on any of the organizational deliverables and interim organizational deliverables for your project, if they are needed.

Partial List of Reports Needed to the 3-Day Project

Name and	Date or Frequency		Distribution
list successful rate Number of mailing list of registered the conference	10/15	Andy	Sponsor Marketing Department
Registration registrations versus the forecast in the project plan		Linda Saunders	Member Serv. Managers all
Comparison of cost to contract	One week Retail contract	Forrest	Sponsor
Speaker list presenting	Weekly	Amy Lee	all

2. **Create a list of the status reports needed to describe how the resources of the project, (time, staff, money, equipment) are being used.**
   - Include the same information listed in Step 1 (name of report, person accountable, etc.).
   - Include reports that were requested in the charter.

- Usually the content of a status report compares the estimated to the actual, that is, the difference between the team's expectations, which are described in the project plan, and the actual expenditure of resources.

> *If ... team is planning to have regular meetings to review ... tatus of the project, then the minutes of ... meetings can serve as the project status report.*

of Reports Needed to Monitor the the 3-Day Conference Project

Name of Report	Frequency	Person Accountable	Distribution	
status report			members	and variances
				Issues resolved
				Potential problems identified

Review Team Membership

Having the right people on the team can ... the difference between a successful project and a not-so-successful ... initial composition ... team was ... as part of the charter. In ... of the project plan, the team needs to review the composition of the team to make sure each person brings the right ... s and expertise to the ... and ... represent the project's stakeholders.

When you need to:	Do it	Page
Ensure that the right ... right people with ... and expertise are ...	Review and Modify Team	63
... that ... are represented	... and Modify Membership	63

Review and Modify Team

Why do it?

To create the best possible team, so the right people are involved in the project and that they have the appropriate membership status.

How do I do it?

1. Review the membership of the team to identify any gaps or overlaps between the assigned team and the skills and expertise required to carry out the project.
   - If there are gaps or overlaps in skills and expertise, recommend changes in membership that will provide the team with the right mix of skills and expertise.
   - People can participate on the team as either a regular team member who attends all team meetings, or as an ad ... member. Ad ... members are required to attend team meetings only when an agenda item requires their presence.

> *Try to ... regular team membership to only people who need ... participate in the entire project. Asking people who ... not have a large stake ... project to participate ... every meeting ... a waste of their time. Remember that other people can be brought into the process at any ... without becoming regular ... bers ... the ...*

2. Identify the key stakeholders that should be represented on the team.
   - Key stakeholders include departments or functional areas of the organization that will be affected by the project. They also include the customers and key suppliers of the project.

- Key stakeholders can also include subprojects. ... by team members who have regular membership status since these team members will represent a subproject or lead a subproject team. (Only type 2 and 3 projects can have stakeholders that include subprojects since type 1 projects don't have ... ts.)
- The team needs to determine what membership status the customer should have, if any.
- Suppliers and special interest groups may also need to be represented on the team. The status can be regular or ad ... depending on the anticipated level of involvement of the team member.
- If a key stakeholder doesn't need a team representative, assign a team member to act as a liaison for the stakeholder.

> *Remember, not all of the project's stakeholders have to be on the team. Consider every group with an interest in the project and then decide what the best composition of the team is. Stakeholders can be kept informed of the progress of the pro... through progress ... if they don't ... to ... end team meetings.*

Ralph Panetta was originally assigned to be a regular team member, however, the team decided to include the activities of his department under the and "Program Development" subprojects. Ralph doesn't need to be on the team, so he serve as an ad hoc member on the two teams.

Key Stakeholders of the 3-Day Conference

Key Stakeholder	Team	Team Status	Team Member
	Jose		
		Regular	
Member	Linda		
New	Amy		
~~Graphic Design and Printing~~	~~Ralph Panetta~~	~~Regular~~	~~N/A~~
The Madison Company	None	None	Ferrara
	None		
Rhonda Levinson			

3. Determine whether other processes or projects should have representation on your team.
   - Consider only the processes and projects that will significantly affect, or be affected by your project. Include a representative on the team only when he or she will be needed to participate in team meetings.
   - The steps involved in identifying the processes and projects that may significantly affect the team's project (or be affected by it) are discussed on pages 61–63, under "Determine What Processes and Projects Fall the Project Scope."
   - If the process or project doesn't require a team representative, assign a team member to act as a liaison.

projects represent or by many project) usually

Other and Affected by the 3-Day Conference

or	Team Representative	Team	Team Member Liaison
Project	None		Amy Lee
project			
and order-taking process	Lyle Yendow	Ad	None
Membership drive project	None	None	Amy Lee

Compare the proposed team to the team assigned by the sponsor.

- If discrepancies exist, include them as issues on the issues list that the project leader will need to resolve with the sponsor.

5. Periodically reassess team membership.
   - If changes are made to the project scope, reassess team membership to determine whether the team is still composed of the right people.

Create a Project Schedule

The value of creating a schedule is to provide team members with a means to coordinate their activities so they may meet their deadlines. A milestone schedule allows the team to take the goal of the project, (to create a final deliverable), divide it into major subgoals, and assign deadlines to each A deliverables schedule is used to show the delivery dates for all of the project deliverables. An activity schedule shows the duration and completion date for each project and/or subproject activity. Once an activity schedule is completed, the information entered into a project management software program, which will provide the team with a way to update and monitor the schedule as the project progresses. A Gantt chart shows the project schedule at a glance, and is useful for both the project team and people outside the project team.

When you	Do this activity:	Page
Set team measure the deliverables help the agree	Construct a Milestone Schedule	89
Show the for each and who is for each one	Create a Schedule	
Determine when each will be completed and who will be responsible to it out.	Create an	
a that shows the overview of the project activity(ies) will be done	Draw a Gantt Chart	

Construct a Milestone Schedule

Why do *it?*

To establish interim goals and deadlines that will guide the project team's progress toward its ultimate goal. The milestone schedule is the foundation upon which all other project schedules are built. It provides the team with an understanding of the sequence of major accomplishments of the project and when they need to be completed.

How do I do *it?*

1. Define the start date for the project and the date that the team expects to close out the project.
   - To begin constructing the milestone schedule, tape some banner paper to a wall.
   - Draw a horizontal line along the bottom of the paper to represent a that encompasses the entire length of the project.
   - At the beginning of the line, record the date that the project started.
   - A project usually starts when the project leader receives the charter. However, if the project leader doesn't receive a charter from the sponsor, the start date is when the team begins to create a charter of its own.
   - At the end of the line, record the date that the project is expected to be closed out.
   - A project is closed out after the final deliverables have been accepted by the customer, feedback from the customer and sponsor has been received and evaluated, and the results of the project and the team's learnings have been summarized in a close-out report.

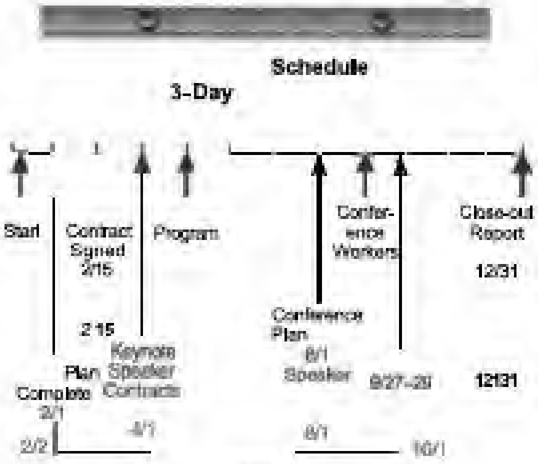
   - Divide the horizontal line into time periods. Most project timelines will be divided into weeks or months. (Weeks for shorter projects, months for longer ones.)
2. Record the date for when the team expects the sponsor to accept the project plan.
3. Add the deadline dates for each final deliverable at the appropriate points on the timeline.
   - The deadline dates for the final deliverables should have been provided in the charter. If these dates were not provided, the team will need to decide when they think each deliverable can and should be delivered. These dates are referred to as delivery dates.
   - Deadline dates and delivery dates may not be the same dates. The deadline date is when the customer expects to receive a final deliverable. The delivery date is when the team thinks it can have the final deliverable ready for the customer. The team can set a date that is sooner than the deadline or the same as the deadline, but the team cannot set a date later than the deadline, without first negotiating a change to the deadline date with the customer and/or the sponsor.
   - If the team thinks that a final deliverable can be delivered before the deadline date, and an earlier delivery is a project priority, use the earlier date. (Identifying project priorities is discussed on pages 35 and 36.)
   - The deadline dates for the final deliverables are milestones for the execution phase of the project. During the execution of the project plan, the team accomplishes the tasks of the project to create the required deliverables.

4. Add additional milestones for the execution phase of the project and assign a completion date for each milestone.
   - One useful method for determining milestones for the execution phase (when the deliverables of the project are created) is to set dates for the completion of each life-cycle stage for each final deliverable.
   - Another method is to review the list of interim deliverables and select the most significant deliverable dates for the project. (Determining what interim deliverables need to be created for the project is discussed on pages 56–60.)

Keep the [illegible] number of milestones in [illegible] phase [illegible] than 10 execution milestones, keep only those that represent the most significant accomplishments for the project and eliminate the others.

[illegible] will need to create other schedules; you [illegible] effort [illegible] schedule timeline [illegible] copies milestone schedule and taping it [illegible] the [illegible] paper for [illegible] schedule.

Also include milestones for the organizational deliverables for your project.



5. Assign a risk rating to meeting the deadline date for each final deliverable. List the reasons and assumptions for each rating.
   - Use a scale from 1–10 to assign the risk rating, with 10 as the highest risk, and 1 as the lowest.
   - A low risk rating (1–3) means there is a low degree of risk or uncertainty that the deadline date will not be met.
   - A moderate rating (4–7) means there is a moderate degree of risk or uncertainty that the deadline date will not be met.
   - A high rating (8–10) means there is a high degree of risk or uncertainty that the deadline date will not be met.

- List the assumptions, uncertainties, and risks that factor into the team's risk rating.
- If the team's risk rating is 4 or higher, reexamine the assumptions that the team made in creating the milestone schedule. List any countermeasures that could be used to decrease the risk of not meeting the deadline dates.
- If the team cannot lower its risk rating to at least a 3, add this to the issues list so that the project leader and the sponsor can discuss it.

Rating Assigned by the 3-Day Conference Team

The dates for the final deliverable, the are September and 29. Team members agreed on a of 1 they are confident that all the y will be before these (Or there won't be a

Don't forget to risk for deliverable 3, the deadline date for the "Project Management Report" is ober 31. there would fficient time prepare the report the ce was held, so was given rating of

Create a Schedule

Why do it?

To help the team coordinate the "hand-off" of interim deliverables from one person (the supplier) to the next (the customer). A deliverables schedule shows the sequence of deliverables to be created, from first to last, and who is accountable for meeting the delivery date for each deliverable. It provides the team with a way to keep the production of the final deliverables on track.

How do I do it?

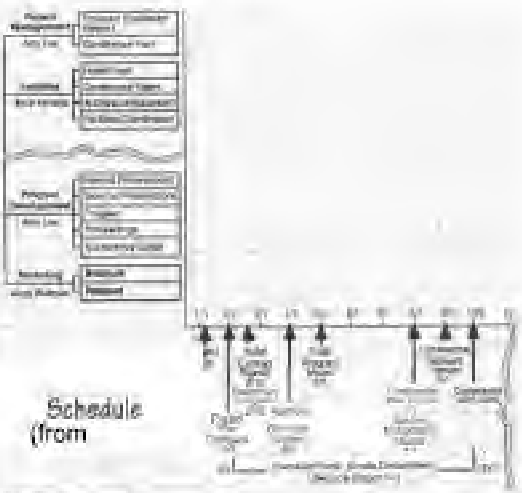
1. Create a diagram on banner paper that will show the flow of all the deliverables that will be created for the project.
   - To begin constructing the deliverables schedule, take a piece of banner paper, at least 10 feet long, and tape it to a wall.
   - Draw or tape a copy of the milestone schedule along the bottom of the paper to create a schedule timeline. (See pages 89–93 for instructions on how to create a milestone schedule.)
   - On one end of the timeline, draw a vertical line.
   - On the outside of the vertical line, draw the tree diagram of subprojects or simply list the names of each final and organizational deliverable for the project and for each subproject, grouped by subproject. Leave enough space to fit all of the Post-it™ Notes of interim deliverables next to the name of the final deliverable.

subproject is creating own deliverables schedule, add the subproject milestone dates to the project's milestone dates listed

To begin, tape a copy of your milestone schedule on the banner paper and draw a vertical line on one end. Next, recreate or tape a copy of the tree diagram of subprojects for your project on the outside of the vertical line. This example was created by the conference team.

Creating a Schedule: Step

(from p. 65)



Schedule (from

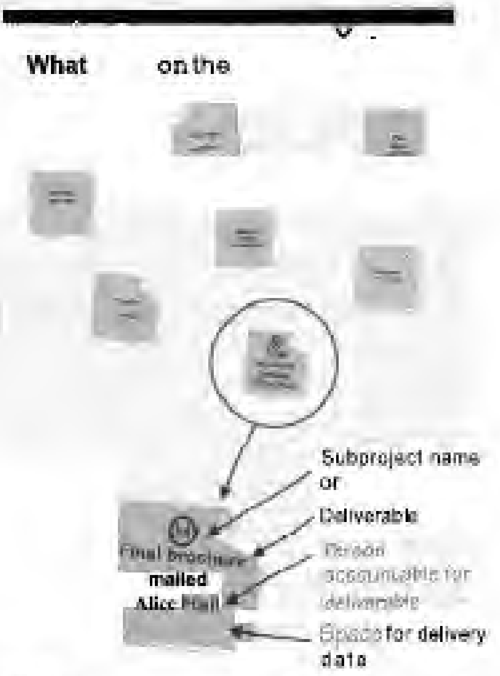
2. Write the name of each deliverable (interim and final) on a Post-it™ Note.
   - Include all the deliverables that will be created by both the project team and the subproject teams. These Post-it™ Notes will be used in Steps 3 and 4 to construct the deliverables schedule.
   - For type 3 projects, put the name or initials of the subproject on the top of the Post-it™ Note.
   - On each Post-it™ Note, add the name of the person who is accountable for the deliverable.
   - Leave space on the lower right corner of the Post-it™ Note to add a delivery date. If a deliverable already has an assigned delivery date, add it to the Post-it™ Note now.

It will save time if team members create the Post-it™ Notes for their subprojects and then bring them to the team meeting.

Don't forget to complete Post-it™ Notes f organizational deliverable for the project. for any interim organizational deliverables.

This illustration shows at a glance the instructions that are described in Step 2 of the activity "Create a Deliverables Schedule."

What on the



Note: No the of the have been thus

3. Place the Notes created for the final deliverables at the appropriate points on the diagram.
   - Align the final deliverables with their delivery dates (along the timeline) and with the correct branches of the subproject tree (along the side of the diagram).
4. Align the interim deliverables with the final deliverables and the timeline.
   - Place each interim deliverable in line with the appropriate final deliverable and in line with the estimated delivery date for the interim deliverable.
   - If any of the interim deliverables are major milestones, align them with the milestone dates.
   - Draw arrows from each interim deliverable to the next interim or final deliverable in the chain. Arrows represent the activities required to transform one deliverable into another.

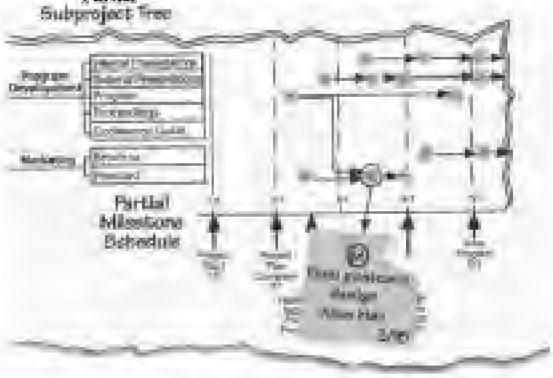
try to align interim with the dates. If align deliverables so the final deliverable dates are met, and then revise the major milestone dates.

The team needs to capture each deliverable that moves outside a subproject. Deliverables that will stay within a single subproject do not need to be included in the deliverables schedule because these deliverables are within the area of responsibility of the subproject and will be monitored by the subproject team.

Place fir organizational deliverables deliverables the paper, aligning them with timeline and the correct branch subproject

5. Add delivery dates to the Post-it™ Notes for the deliverables.
   - Write the delivery date in the lower right corner of each Post-it™ Note.
   - The delivery dates for the final deliverables should be no later than the deadline dates. If this is not the case, go back and try to align the interim deliverables so that the deadline dates will be met. If this is not possible, put it on the issues list to resolve with the sponsor.

Partial Schedule for the 3-Day Conference Project



6. Review the major milestones, and revise if necessary.
   - Add more important delivery dates, and delete less important ones.
   - If there are more than 10 execution phase milestones, put them in order of priority, and delete the less important ones.

to tell you a true is to look for where several deliverables feed deliverable. This parts of the project come together. Milestones, however, be based the perceptions accomplishments

Interim and Milestone Dates for the 3-Day Conference

The project team decided that the subproject deliverables "postcard mailed" and "brochure mailed" were critical the project and added the milestone schedule. The deliverable "speaker deleted.

7. Place an asterisk on the Notes where the customers' acceptance criteria for the deliverable needs to be clarified.
   - Get agreement on the criteria outside the team meeting. The criteria should be written down as part of the documentationfor the project plan.
8. Revisit the team's risk ratings for meeting the deadline dates for the final deliverables. Revise if necessary.
   - Use the milestone schedule that the team created to check dates and risk ratings.
   - Now that the team has more detailed information about the interim deliverables, their interdependencies,and theirtargeted deliverydates,it's a good idea to reassess the team's risk ratings.
   - If the team's risk rating is 4 or higher, reexamine the assumptionsthat the team used increating the deliverables schedule. List any countermeasures that could be used to decrease the risk of not meeting the deadline dates.
   - If the team cannot lower its risk rating to at least 3, add this to the issues list so that the project leader and the sponsor can discuss it.

should decisions project—lower earlier delivery, features of the final deliverable. For example, the schedule over budget, will ensure the schedule is met, but will cost more money, are good options.

Create an Activity Schedule 4

Why do it?

To create a schedule of the activities required to create all of the interim and final deliverables. The activity scheduleallows the team to make sure that each activity is completed at the appropriate time, which ensures that the final deliverablewill also be completed on time.

How do do it?

1. Create a diagram on banner paper that will show the flow of all the activities that need to be completed for the project.
   - To begin constructing the activity schedule, take a piece of banner paper, at least 10 feet long, and tape it to a wall.
   - Draw or tape a copy of the milestone schedule along the bottom of the paper to create a schedule timeline. (See pages 89–93 for instructions on how to create a milestone schedule.)
   - ends of the timeline, draw a vertical line.
   - On the outside of the left vertical line, write the names of the people who will be responsible for getting the activities of the subproject completed (or the activities of the project if you have a type 1 project). Leave enough space to fit all the it™ Notes of activities next to each name.
   - Separate the names of team members from the non-team members.
   - Draw a horizontal line across the diagram. This line should be above all the names of team members and non-team members and should extend from one end of the diagram to the other.

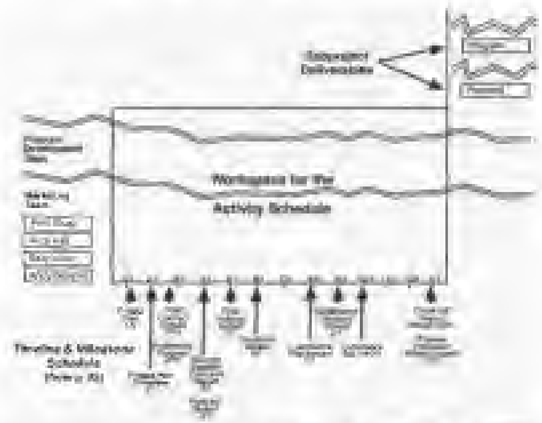
   - Above the horizontal line, and to the right of the right vertical line, list the deliverables for either the project or the subproject, depending on what project type the team has.
     - For type 1 projects (this schedule is optional): The project teamshouldlist the final deliverables and organizational deliverables for the project.
     - For type 2 projects: The project team should list the final deliverables and the organizational deliverablesfor each subproject, or tape a copy of the tree diagram that shows the deliverables by subproject.
     - For type 3 projects: The subproject team should list the final deliverablesand the organizational deliverablesfor the subproject, or tape a copy of the part of the tree diagram that is specific to the subproject.

If a subproject team is creating its own activity schedule, subproject 's milestone dates to the project's milestone dates listed along timeline.

2. Identify all the activitiesthat must be accomplished to create each interim and final deliverable.
   - Write each activity on a Post-it™ Note. Leave space on the Post-it™ Note to write the name of the person who is responsiblefor the activity, and space for the start and end date of the activity.
   - Teams with type 2 projects will be completingan activity schedule for the project as a whole. Each team member should identify the activities that he or she will be carrying out for his or her subproject.

To begin, tape a copy of your milestone schedule on the banner paper and draw vertical lines at each end of the timeline. On the left write the names of the who are responsible for the activities, both team members and non-team members. Draw **a line above from of the diagram the other. This example was created the Marketing team of the 3-day**

Create an Activity



- Teams with type 3 projects will be completing an activity schedule for each subproject, but not for the project as a whole. Each subproject team member should identify the activities that he or she will be carrying out.
- One way to identify activities is to refer to the arrows on the deliverables schedule. These arrows represent the activities required to transform a deliverable into the next deliverable in the sequence, ending with the final deliverable. If the team translates each arrow into an activity or set of activities, all of the activities for each final deliverable will be captured, in the order in which they will occur.
- In the space above the horizontal line of the diagram, line up the activities needed to create each deliverable with the appropriate final deliverable or subproject listed on the righthand side of the diagram. Sequence the order of activities from left to right on the diagram.

and countermeasures as Post-it™ Notes since ... are ... es.

To make it clear which activities ... with each final deliverable, use diffe... color Post-it™ Notes to ... the flow o... for any specific deliverable.

... forget to create Post-it™ Notes for activities that will create the organizational deliverables.

3. Vertically align the activities so that they meet the delivery dates for the appropriate deliverable.
   - Use the delivery dates from the deliverables schedule.
   - Adjust the delivery dates, if necessary, to create a workable schedule that meets the deadlines.
   - After aligning all the activities, write the start date in the lower left corner of the Post-it™ Note and put the end date in the lower right corner.

After all of the activities have been assigned a start and end date, the critical path can be ... optional.) The critical ... is the shortest possible path from the first ... Refer to ... Memory jogger™ ... pages ... sections on calculating ... critical path.

If you ... which then changes ... delivery ... for a deliverable, ... delivery does ... exceed ... date for the ... if it has one. ... the date exceeds the deadline date, put this prob... on the is... resolve it with the sponsor and/or th... customer.

4. Move all the Post-it™ Notes below the horizontal line of the diagram, aligning each activity with the person who is responsible for completing it.
   - Move the Post-it™ Notes to align them with the name of the person who is responsible for completing the activity. Keep each Post-it™ Note aligned with the completion date for the activity.

- Add to each Post-it™ Note the name of the person who is responsible for completing the activity.

Make ... that you haven ... assigned more work ... each person ... completion ... required. If you have, either reassign ... activity or

5. Using arrows, connect one activity to the next activity in the chain.
   - In the deliverables schedule, the arrows represent activities. In the activity schedule, the arrows represent deliverables.

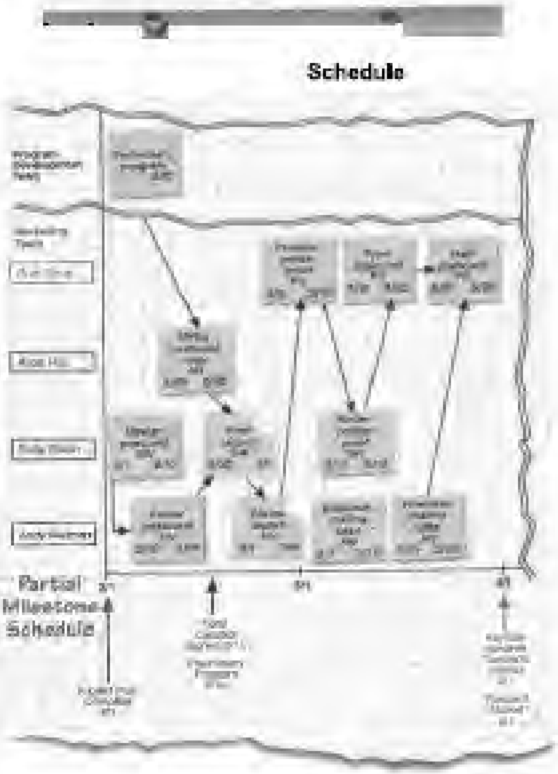
Check the arrows to see if they represent deliverables (which they should) o... (which they shouldn't). If any arrows actually represent activities, replace the arr... with a Post-it™ Note of the activity.

For type 3 project ...ms: If any ... go outside ... subproject, make su... deliverable created as a result of this activity is included on the deliverables schedule.

6. Assign a team coordinator to any activity that will be completed by someone outside the project team.
   - Assign someone from the team, (or in the case of subprojects, someone from the subproject team), who will be accountable for making sure the activity gets done.
   - Put the coordinator's name on the Post-it™ Note and mark it with a "C." This will remind the team which activities need to be coordinated and who is responsible for coordinating them.

7. **For each review listed in the review and approvals table, add a start and end date in the table.**
   - Creating a reviews and approvals table is described in the section called "Complete the List of Required Reviews ... Approvals" on pages 69–72.
8. **Revisit the team's risk ratings for meeting the deadline dates for the final deliverables. Revise if necessary.**
   - If the team's risk rating is 4 or higher, define some countermeasures that will decrease the team's risk to at least a 3. If the team cannot lower its risk to at least 3, add this to the issues list to resolve with the sponsor.

This illustration shows some of the activities to be completed by the Marketing subproject team of the conference project to produce the postcard.



Draw a Gantt Chart

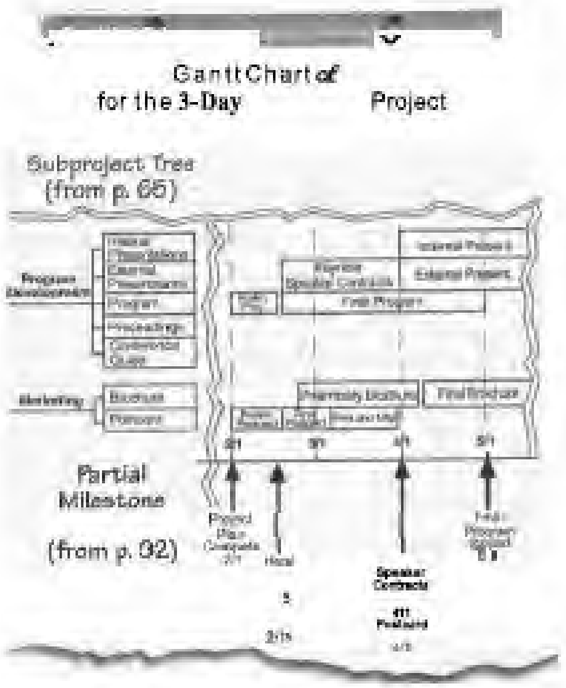
Why do it?

To display the major activities of the project and their duration. The Gantt chart helps both the team and people outside the team to understand the major activities of the project and their progression in time.

How do I do it?

1. Using the deliverables schedule, draw a bar around each deliverable that extends from the start date of the first activity to the date of the last activity.
   - The bar indicates the amount of time that it will take to complete all the activities that are needed to create the deliverable.
   - Inside the bar, write of the overall activity that the bar represents and the person who is accountable for making sure the deliverable gets created.
   - There will be one bar for each interim deliverable, which means there will be more than one bar in line with each branch of the tree diagram (or with each final deliverable listed on the outside of the left vertical line).
   - Remove the deliverables Post-it™ Notes from the schedule.

Before you begin, make sure you've made a copy of the deliverables schedule.



Estimate the Staff Effort Required

The time that people in an organization expend on a project a major expense. It is necessary to estimate the time required to complete the project in order to make the needed resources available. And, if an organization wants to know whether its commitments to one project will interfere with other projects or assignments, it is crucial to create a staffing forecast for the work effort needed on the project. The staffing forecast is an estimate of this effort per day, week, or month, for the duration of the project.

When you need to:	this	Page
the total that a of work on the project.	Needed	13
the amount people will spend the project to avoid exceeding the time the workers	Create a	118
Ver that the to an ... of subproject does not ... or her availability	Create a Staffing Forecast	118
the individual subproject that each during each of	Create a Staffing Forecast	

Estimate the Total Staff Time Needed

Why do *it?*

To determine the total amount of staff time that will be required to complete the project. The staff time estimate tells the team if the project can be completed within the staffing limit defined by the sponsor.

How do I do *it?*

1. Estimate the amount of staff time needed for each subproject or each individual that will work on the project.
   - Type 1 projects — Each team member should use this formula:

     #hours or days per week (or month) X of weeks or months the team plans to meet.

     the individual hours to get a total estimate.
   - Type 2 projects — Time needed for each person to complete his or her subproject. Add up the estimates for each subproject to get a total estimate.
   - Type 3 projects — Time needed for each subproject team to complete the subproject. Each subproject leader and his or her team work to prepare an estimate for each person on the subproject. Add up the individual estimates for to a total estimate for each subproject.
   - Make the estimate in hours, weeks, months, or years, as appropriate

     estimate time for work that is the of the new to estimate time for people who will charged overhead. If time re somehow overhead charges.

is staffing forecast where staff is estimated by period, ahead and do that first. The team will have totals by individual or subproject to use for estimate.

Don't forget to on that staffing.

2. Rate the accuracy of the total estimate.
   - The accuracy rating indicates how comfortable the team (or subproject team) feels that the estimate is an accurate prediction of how much time will be spent on the project.
   - Use the letters H, M, and L (high, medium, and low) to indicate your team's (or subproject team's) confidence in the estimate.

     H = actual staff time could vary by 10% from the estimate

     M = actual staff time could vary by 25% from the estimate

     L = actual staff time could vary by 50% or more from the estimate
   - A low accuracy rating means that the team doesn't really know, the estimate is just a guess.
   - List the reasons for the rating.

accuracy is or the estimate is below staffing team might to adding some on the estimate to cover the uncertainty of estimate.

3. Compare the team's estimate to the sponsor's limit on staff time, if any.
   - If the sponsor did not set a limit on staff time, the team should review the assumptions that were made in creating the estimate to make sure they were sound, and to be confident that this is the best estimate the team can make at this time.
   - To compare the estimate to the limit, calculate a range (f) for the estimate, based on the accuracy rating assigned to it. For example, if the team has an estimated staff time of 100 hours, with a high accuracy rating equivalent to a range of f the estimate could vary by 10 hours, more or less. The hourly range for the estimate is 90 to 110 hours. (The range for each accuracy rating — high, medium, or low — is listed in Step 2.)
   - If the high end of the range is close to the limit, either slightly under or even slightly over, and the assumptions for creating the estimate are sound, then the team should move on to planning activity. Staff time is difficult to estimate and it's the effort trying to improve the estimate if it is already close to the limit.
   - If the high end of the range is either much higher or much lower than the limit, the team should check the assumptions that were made in creating the estimate to make sure they were sound. If the assumptions are sound, list the reasons for the deviation from the limit and put staff time on the issues list for the project leader to discuss with the sponsor.
   - If the high end of the range is over the limit, list the assumptions that the team used to create the estimate and put the issue on the issues list for the project leader to resolve with the sponsor.

team used ranges given in Step if estimate For might an estimate high accuracy rating is within ±5% range instead range. case; ±5% range is possible project 100%.

Estimates of Staff Time
for the 3-Day Conference

The Type 3 project, so efforts have been estimated.

	Staff	**in Hours**
	Marketing	250 hours
	Facilities	350 hours
	Registrations	200
	Program Development	475 hours
	Project Management	100 hours

Total **1,375 hours**
months (M)
1,375 hou ours per week) **34,375 weeks**
weeks/4.3 (weeks **per month)** =
months

(M)
Staff time **for medium** **= 1,030 to 1,720**

for **We** have a of how much will take because we had a conference year. Unfortunately, we did not keep good records of the time that staff put into project. we think the rating is

Staffing None
Even though is no staffing has asked our team to monitor the that invested in the project.

Create a Staffing Forecast

Why do *it?*

To assess when people's time will be required over the course of the project. The staffing forecast gives credibility to the team's request for human resources and it is useful for tracking whether or not staffing expenditures are ahead of or behind the budgeted amount.

How do I do *it?*

1. Calculate the amount of time that each person or subproject will spend on the project by time period (day, week, month, or quarter).
   - The timeframe used for calculating the forecast depends on the activity level in the project. For example, a long-term project with very little ongoing activity may need to monitor staff time every month, while another long-term project with a lot of activity will need to monitor staff time every week.
   - Subproject team leaders should ask each individual subproject team member to estimate his or her effort by time period, and then he or she can add the estimates together. The project team adds up the subproject estimates to get the project estimate.
   - If your project is type 1 or 2, and your team thinks that a staffing forecast is needed, ask each individual to estimate his or her effort by time period, and then add the estimates together.

subproject schedule, an easy way to determine the staff time is to of each activity of activities will each activity on the per person, per time period, can see schedule and staff allotments in

2. Make adjustments if there are staffing conflicts within the project or with other projects or assignments.
   - If adjustments cannot be made for commitments (without affecting the deadline dates), put this issue on the issues list so that the project leader and sponsor can resolve the problem.
3. Add up the total and cumulative hours for each time period.
   - The cumulative total in the final time period should match the total staff time estimate.

Staffing Forecast for the Conference

Staff Time in Hours

Subproject	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Marketing	16	16	42	48	72	32	4	4	4	4	4	4
Facilities	32	10	40	10	4	4	40	60	130	12	4	4
Registrations	4	4	4	4	6	12	18	50	86	4	4	4
Program Development	70	66	75	40	40	40	40	12	80	4	4	4
Project Management	8	8	6	6	6	12	12	8	8	8	8	10
Staff Time in Hours	130	104	167	108	128	100	114	134	308	32	24	26
Cumulative Staff Hours	130	234	401	509	637	737	851	985	1,293	1,325	1,349	1,375

Create a Project Budget

Whenever a project will incur costs, either internally or from external purchases, the team needs to estimate those costs so that the organization knows how much money allocated to the project. If it is important for the organization to know when the money will be spent, the team needs to create a spending forecast.

W you need to:	Do this activity:	Page
Show a f of how money will be s during the	Estimate Costs	122
Plan flow	Create a	126
as don't exceed the for the	Create a Forecast	128

Estimate Costs 4

Why do it?

To determine the amount of money that the organization should allocate for both internal and external costs of the project. A cost estimate tells the team whether it will be able to complete the project within the spending limits set by the sponsor.

How do I do it?

1. Estimate the cost for staffing the project and the cost for other internal charges and calculate the total internal cost for the project.
   - Costs are considered internal when money is being spent inside the organization. Internal costs consist of staff costs and other charges such as internal supplies, copies, materials from an inside group, and equipment charges.
   - Estimate internal costs when they will be part of the costs tracked during the project, or when the sponsor requests them. Usually staff costs are estimated when the customer will be paying for these charges directly.
   - To get a staffing cost:

     your team's estimates for the amount of staff time needed from each team member or each subproject;

     these numbers by the appropriate billing rates, an hourly, weekly or monthly rate;

     these numbers together to calculate the total cost of staffing the project.

   - To calculate the total for internal costs, add together the staffing cost and the cost for internal charges.

If you know rate for team subproject, ask the per what billing rate you

2. Estimate any external costs and calculate the total for external costs.
   - External costs are purchases made from outside suppliers. Examples are: materials, travel, and equipment rental or purchase.
   - External purchases are usually made with a purchase order, expense account, or blanket order.
3. Add together the estimate for internal costs and the estimate for external costs to get an estimated total cost for the project.

sure all costs in total estimate scope. For example, As of your team's , one of will need to retrain its people or add new equipment. If issue it to issues that it be sponsor.

Don't forget to take into account any constraints on the project that relate to spending.

4. Assign an accuracy rating to each estimate for internal costs, external costs, and the total project cost.
   - The accuracy rating indicates how comfortable the team feels that the estimates are an accurate prediction of what will be spent.
   - Use the letters H, M, and L (high, medium, and low) to indicate your team's confidence in the estimates.

     H = actual costs could vary by from the estimates

     M = actual costs could vary by from the estimates

     L = actual costs could vary by 50% or more from the estimates
   - A low accuracy rating means that the team doesn't really know, the estimates are just guesses.
   - Consider the accuracy of the estimate of staff time required for the project in determining the accuracy of the total estimate for internal costs.
   - List the team's reasons for each accuracy rating.

If your an rating medium or low for estimate, below limit, adding moneys to the offset the of of money because the

5. Compare the team's cost estimates to the sponsor's limits on spending, if any.
   - Compare only those estimates that the sponsor has set a limit on. For example, if the sponsor set a limit only on the total project cost, then the team needs to compare the total cost estimate to the sponsor's spending limit on the total project cost.

- If the sponsor not set a the team should review the assumptions that were made in creating the to make sure they were sound, and to be confident that is the best estimate the team can make at time
- To compare the estimate to the limit, calculate a range for the based on the accuracy rating assigned to For example, the team has cost of $100, a medium accuracy rating to a range of the could vary by $25, more or less. The dollar range for the estimate $75 to $125. (The range for each accuracy rating — high, medium, or in Step 4.)
- If the high end of the range is over the limit, the the team used to create the estimate and put the issue on the list for the project leader to resolve with the sponsor.

does need to use ranges given in Step 4 For the team might feel with high accuracy ±5% range instead of ±10% range. In this case, the team ±5% range

Cost Estimates for the 3-Day Conference

These tables show the breakdown of all the estimated costs for the conference. The tables represent the work done in Steps 1 through 5 on pages

Internal Costs	Cost Items	Staff Time (in Hours)	Hourly Rate	Total Cost
Staffing Costs				
		250	$25	$6,250
	N/A	350	$25	$8,750
Registrations	N/A	200	$25	$5,000
Program Development		475	$25	$11,875
	N/A	100	$25	**$2,500**
			Subtotal	**$34,375**
Other Internal Costs				
Marketing Materials	Brochures, postcards	N/A	N/A	$25,000
			Subtotal	**$25,000**
Estimated total				**$59,375**
for medium of the costs are staff was accuracy		**More** than 50% costs and the a		

on *next page*

Cost Estimates for the Conference (continued)

External Costs	Cost Items	Staff Time (in Hours)	Hourly Rate	Total Cost
Hotel (staff)	The		N/A	$10,000
Food (based on	The		N/A	$42,400
Audiovisual Company	TBD		N/A	$25,000
Travel	Staff/ speaker travel		N/A	$5,000
Additional to unknown costs				
Estimated total external costs (Range ±5% or **$4,270**)				**$85,400** to
Reasons for high rating: The costs for the hotel and food are established by contractual agreements and audiovisual costs are based on prior experience. Travel expenses are on the speakers selected and locations, so moneys have been added to the budget to allow for the unknown cost.				
Estimated Total Project Cost				**44,775**
Sponsor's Cost Limit: $90,000 for external costs only. The team's for external costs and was assigned a accuracy to a range, so the upper range of the ($89,670) under the sponsor's				

Create a Spending Forecast

Why do *it?*

To project when the money for the project will be spent. The spending forecast gives credibility to the team's cost estimate and it helps the team monitor the spending levels of the project.

How do I do *it?*

1. Assign the costs for the project to the week, month or quarter in which the cost will be committed or actually spent.
   - An easy way to distribute the costs is to match each cost to an activity or set of activities in the activity schedule. (The activity schedule is described on pages 102–109.) Then simply write the costs under the appropriate time period along the bottom of the chart. This will allow the team to see the schedule and costs by time period in one chart.
   - Add up the total and cumulative costs for each time period.

If internal must forecasted, first complete staffing forecast, staffing time period. Distribute as appropriate.

Don't spend too much trying to make the forecast perfect. Ma the guess possible.

Spending Forecast for the 3-Day Conference

The table below shows just a part of the spending forecast for the conference.

Cost Category	Costs (in dollars) January	February	March	April	May
Staff Costs			4,200	2,700	
Internal Charges			5,000		7,000
External Costs		1,000			
moneys					
Monthly Total	3,250		9,200	2,700	10,200
Cumulative Total	3,250			18,750	28,950

Assemble the Project Plan

Once the team has completed the activities that are required to produce a project plan, it's time to assemble the plan and get it approved. The plan describes what the team will do as it begins to execute the project. The plan should include an executive summary and all of the documents, tables, lists, etc., that were produced in the planning process. Once the plan is assembled, it needs to be reviewed with the sponsor and customer, approved, and then distributed to all of the key stakeholders of the project.

When you need to:	Do activity:	Page
Get approval to move forward with the project.	the Plan	131
Make sure everyone is using the same game plan for project.	Assemble the Project Plan	131
Create one source to answer project-related by anyone at any	Assemble the Project Plan	

Assemble the Project Plan

Why do *it?*

To create a document, sometimes referred to as "the project book," that details the project plan. The plan describes how the team envisions doing the project, and after it is approved, it provides the team for executing the project. The project book is also the "answer book" for team members, stakeholders, the project leader, and the sponsor.

How do I do *it?*

1. Create an executive or leadership summary for the project plan.
   - The summary's components and organization will vary according to your team's project and preferences, however, your team may want to use the outline on the next page to get started.

Generic Components of a Leadership Summary

Project Scope

the name and objectives of the project
the to be produced by the
the life-cycle stages of each and the customer's for accepting each final deliverable
any organizational goals for the project.

Don't forget about any organizational that are by your project. You'll need to ... them, ... their life cycles and the customer's criteria for accepting each one.

Project Scope Risk

the key of the final and the key countermeasures selected by the team to reduce the for each.

Project Resources

Team Membership: List the regular and ad members of the team.

Schedule: Show the milestone schedule and the deadline dates. Define the team's risk for the deadline dates and list the key countermeasures selected by the team to reduce the risk not meeting the dates.

Staff Time: the estimate for the total staff for the project, the rating for the estimate. Indicate the limit, there is one, whether the exceeds the limit, and if it does, the why the exceeds the

Budget: the total and external costs, and the total estimate for the the there is one, whether the estimate exceeds the limit, and if so, the why the estimate exceeds the

Other Issues

List any other key issues, including those related to boundaries.

2. Assemble the project plan.
   - Include the following sections:
     – Original Charter
     – Team Guidelines
     – Project Scope
     – Required Reviews and Approvals
     – Project Scope Risk
     – Required Reports
     – Team Membership
     –
     – Staffing Estimates and Forecast (if required)
     – Budget Estimates and Forecast (if required)
   - Attach tables, charts, and other diagrams as appropriate.

team's project be to refer to if it n cover. contents, each date of project must be updated as changes are made plan. The project book can even be electronical

3. Review the project plan.
   - All the team members of the project should be involved in reviewing the plan. If isn't feasible, choose the team members who represent a good cross section of the organization.
   - Do a "sanity" check to make sure the plan is complete and accurate.

4. Review the plan with the sponsor and customer, if appropriate.
   - Make revisions to the plan as needed, based on sponsor and customer input.
5. Sign and distribute the plan.
   - The team members, the sponsor, and the customer, when appropriate, should sign the project plan. This is the contract that the team will use in moving forward with the project.
   - Distribute the plan to team members, the sponsor, customers, and all key stakeholders of the project.

Chapter 5

Doing the Project

Now that the project plan has been completed and approved, it's time to execute the plan, which means creating the according to the customers' criteria for acceptance, within the of the budget, and according to the in this point, the team needs to anticipate potential requests for changes to plan. As the plan is being executed, the team needs to regularly to review the status of the project. In addition, both the customer and the sponsor need kept informed of the project through regularly scheduled review meetings the team.

Monitor Project Progress

Why do it?

that the project is moving forward as planned. Monitoring project progress gives the team a warning system for problems with the project, which allows the team to resolve them early and avoid more costly changes later on.

How do I do it?

1. **how often the schedule, staff time, and budget "actuals" should be monitored.**
   - Actuals are the real expenditures of money or staff time during the project, or the completion dates of scheduled activities for the project.
   - How often the actuals are tracked or monitored depends on how fast the work of the project is being done. For example, if a project will last only two months, actuals should be tracked at least once a week. If the project will last two years, actuals should be tracked at least once a month.
   - Typically, the project leader monitors the main project, and subproject leaders monitor the subprojects.
   - Monitor subprojects at least as often as the main project.

If your did or staff time of the forecasts according the periods that are in be forecast.

Compare the schedule, staff time, and budget actuals to the plan, and calculate any variances.

- A variance occurs when the project is behind or ahead of the plan. Variances can be positive (the project is ahead of schedule) or negative (the project is over budget). Critical variances indicate the project as a whole is off track.
- The project leader can determine if the project is ahead of, behind, or on schedule by comparing the actual completion dates with the projected completion dates (as defined in the milestone, deliverables, and activities schedules that are described in Chapter 4).
- For example, to calculate the schedule variance for a deliverable or for the completion of a scheduled activity, subtract the date an activity or delivery actually occurred from the date it was scheduled to occur. These calculations provide the schedule variance in days or weeks.

Variance Calculation Sheet for the Conference

Completed May 31

Project Plan Area	Project Plan (including changes)	Actual Project Results	Variance	Explanation
		Schedule (completion dates)		
Program		5/4	days	Amy Lee was out for a week, which the program.
Complete Review for Preliminary Brochure	5/18	5/20	-2 days	The delay in issuing the program created a delay in completing the brochure.
		Staff Time		
Hours Expended	985 hours	1,075 hours	-90 hours	Preparation of the marketing materials took longer than projected.
Charges		N/A		
Charges	$29 450			Hotel was $500 than planned.
Total				

your staff time spending part of the project plan, it's variance the actuals from the cumula the plan. your team did not do any forecasts, the project leader will to decide whether staffing spending expenditures comply with the plan.

3. Decide what action should be taken, given the kind of variance found.
   - If there is no variance in the schedule, staff time, or spending, and the numbers are accurate, the project is likely on course.
   - If there is a positive variance, determine the reason for the variance.
   - If there is a negative variance, the team will need to take further action. Is there a reasonable explanation for the variance? Is the variance a cause for concern?
     - If the variance is not a cause for concern, simply report an explanation for the variance.
     - If the variance is a cause for concern and can be resolved easily (without changes to the plan), then resolve it. If the variance cannot be resolved **easily,** put it **on** the issues list with the date required for its the action to **resolve** the variance requires changes to **the** project **the** flowchart on page 145 as a in making changes to **the** plan. (The **activity** "Resolve Problems and Manage Change" on pages 141–145 describes the process for making changes and includes this flowchart illustration.)

Although a positive variance generally good, it still plan. Perhaps something missing or a problem produce negative later. Examine reasons every variance, positive and negative. If as lems, create countermeasures to eliminate or reduce the problems urring.

Actions Taken on May Variances (for 3-Day Conference)

No actions are required because:

1. The three-day delay in issuing the final program delays the brochure but does not affect other activities.
2. The two-day delay in the brochure is not to the project.
3. Staff time is being tracked but has no set
4. There is a $500 positive variance because the required hotel deposit is less than the team anticipated, but this variance will when the final hotel bill is paid.

Resolve Problems and Manage Change

Why do *it?*

To respond to problems or requests for changes to the project plan. Having a process for managing change gives the team a way of revising the project plan, when needed, so that the project stays focused on satisfying the customer.

How do I do *it?*

1. When a change is proposed, decide whether or not it is a good idea.
   - Requests for changes may come from someone outside of the team, such as the sponsor or a customer. Also, as team members are monitoring any **changes** in the environment, they may **need** to propose that will address a problem that has occurred or has the potential to occur. Changes in the environment include organizational, regulatory, competitive, and changes that **could** have an impact on the project.
   - Not every proposed change should be adopted. Be sure to ask, "Is this change good for the customer? The organization? The project?"
   - If the change will not add value to the project, put it on the issues list to resolve with the person who requested the change.
2. If the change is a good idea and doesn't require modifying the project plan, implement it.
   - If the change doesn't modify the project scope, customer acceptance criteria, schedule, staff time, budget, or risk level of the project, implement it.

3. **If the change requires modifying the project plan, define the impact on the plan and prepare a change order.**
   - A change order is a one-page description of the proposed change and its impact on the project. How will the change affect the risk level of the project? The cost? The schedule?
   - **Most parts of the project** interdependent, **meaning that** one part of the plan **is** changed, other parts **will likely** need **to be changed as** well. **For example,** if a to the project scope is **required,** **affect** time, budget, risks **of creating** the **and** reviews and **approvals needed. Be sure the** team examines all the ramifications of a requested change.

A change plan really team needs follow set of that create project plan. However, if the simple team through steps quickly.

riorities of project side team deciding how to the plan. For is most important has been requested to scope of project, ask for ways to change staff get before modifying the schedule.

Amy Lee found out that the Print Shop was having equipment problems and this would delay the printing of the conference proceedings, which were critical. An outside printer quoted a higher charge than was budgeted, so a change order had to be submitted to the project team and the sponsor.

Change Order

Date: 7/10 Originator: Amy Lee

Change order number: 10

Description of change: Go to an outside printer to print conference proceedings

Why Shop difficulty deadlines because reliability is the workload putting a on the operation

Change requested: Go to printer

Proposed out for and print proceedings wi an

Impact

for change

Impact on team: None

Impact on No impact change

Risk for No

Impact

on project reports: None

Date Approved:

Project Leader Sponsor Customer

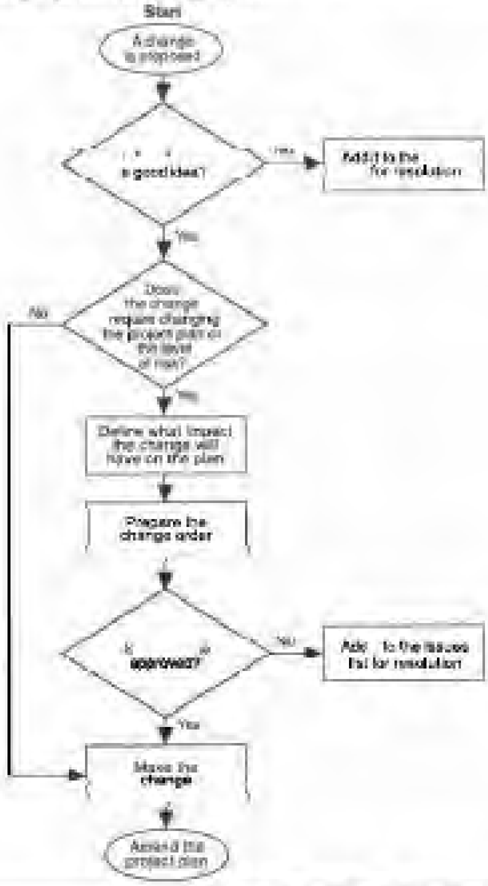
4. Have the change order approved, and implement the change.
   - Usually the project leader and the sponsor approve the change order.
   - Customers should also approve the change order if the change will affect them.

The of the 3-day conference are not project team and therefore are not managing The approved change order to the

5. Update the project plan to incorporate the change.
   - It is the project leader's responsibility to incorporate the change by amending the appropriate parts of the project plan.

Managing Change

The following flowchart shows the steps involved in managing change in a project.



Hold Project Team Meetings

Why do *it?*

To periodically review with the team how the project is progressing so that concerns and opportunities can be unearthed, discussed, and resolved.

How do I do *it?*

1. Prepare the variance reports on the project before the project team meeting.
   - Variance reports represent a quantitative review of project progress. (See page 137 for instructions on how to calculate a variance.)
   - Usually the project leader prepares these reports and makes them available at each team meeting.

Team members who are leading subprojects (a type 3 project) should prepare variance reports for their subprojects and submit them to the project leader before each team meeting. Subproject teams also need to have their own team meetings.

2. Schedule periodic team meetings to review the status of the project.
   - The frequency of team meetings will depend on the length and activity level of the project.
     - Short-lived projects, (those lasting six months or less), or projects that have a lot of ongoing activity, may require weekly or biweekly meetings.
     - Long-lived projects, (those longer than six months), or projects that have periods of little activity, may require monthly or bimonthly meetings.

Type 1 do not team meetings since the team is already meeting regularly to do project work. A project review should be periodically added to the agenda for the regular team meetings.

Don't forget to invite the ad hoc members of the project team if any of the agenda items may affect them or their viewpoints are needed to resolve an issue.

Any bimonthly
the project team during the early
part of the execution phase of the project.
the conference draws closer.
project team meet weekly, or
if

3. Review the current status of the project.
   - Team members should provide an update on the status of their assignments or the work in their subproject.
   - Team members should report their concerns or issues with the progress of the project. If any of these concerns cannot be immediately resolved, put them on the issues list.
   - The team should review the progress of the deliverables, and discuss any deviations from the plan.

   - The project leader should compare the actuals to the plan, and the team should discuss the reasons for these variances.
   - The team should revisit the risk rating for the project scope and the risk ratings for meeting the deadline dates to determine if they are still valid.
     - If the risk rating has dropped, then some or all of the countermeasures may no longer be needed.
     - If the risk rating has increased, then new countermeasures may need to be developed. Any changes to the countermeasures should be reflected in the schedule.
   - The team should again estimate staff time and spending to make sure they don't exceed the limits, if there are limits. If the estimates do exceed the limits, develop some countermeasures.

4. Review anticipated problems and requests for changes to the plan.
   - If requests for changes to the project plan have been made, follow your team's process for managing change (see page 145 for a generic process).
   - Scan the environment for potential problems. Problems in the environment include organizational, regulatory, competitive, and technological changes that have an impact on the project.

Monitor to be sure nothing often realize when change the project. may neglect to inform the team of changes I have

5. Review and update the issues list.
   - Review all the issues on the issues list, and note the resolution status for each issue.
   - Fully discuss any issues that the team has scheduled to be resolved by the meeting date. Review other issues quickly unless they are critical to the project.
   - If the team cannot resolve an issue or cannot resolve it by the required date, decide what further action is required and make the required changes to the issues list.
6. Clear the "parking lot."
   - Review the "parking lot" to be sure that all the issues, ideas, or questions that were brought up during the meeting have been addressed.
7. Recognize accomplishments in the project.
   - Balance the discussion of problems with a good dose of "a job well done." Everyone needs recognition now and then.

Hold Project Review Meetings

Why do it?

To periodically review the progress of the project with the sponsor and the customer. Any problems with—or ideas for—the project that the team, sponsor, or customer may have discussed, allowing the team to correct or improve the project process.

How do I do it?

1. Schedule periodic sponsor and customer meetings to review the status of the project.
   - Sometimes the customer is not available, and the team will not be able to invite the customer to review meetings.
   - Formal meetings with the sponsor and customer should be held on a monthly or quarterly basis, depending on the length of the project, the level of activity, or the degree of project risk. (Shorter projects should have monthly meetings, and longer ones quarterly meetings.)
   - Informal, informational meetings between the project leader and the sponsor or customer should be held as needed.

if the sponsor and review meetings can combined. This will everyone ... would be involved in the

Amy project for the 9-day and project have monthly review meetings. The project team is included in these when a life-cycle stage for the completed. For example, when the conference is ready to be at the end stage 2 (Design or Plan), Amy, Chris, and the rest of the team will have a project review meeting.

The customers the 3-day conference are not available to the project team and therefore are not involved in the Customer are discussed the team review and sponsor meetings. Marketing the voice of the at these meetings.

2. Review the current status of the project.
   - The project leader should report on the progress of the deliverables.
   - The project leader should report on the status of the schedule, staff time, and budget; compare them to the project plan; and explain any variances.
   - The project leader should report on the current status of the risk for producing the deliverables and the risk of not meeting the schedule.

3. Discuss changes in the environment and anticipated problems.
   - Discuss changes in the environment, such as organizational, competitive, regulatory, and technical changes that could affect the project.
   - Review potential problems and requested or anticipated changes to the project plan. The customer and sponsor can help highlight things to look out for, suggest ways to avoid problems, and address or resolve problems.
4. Review the issues list.
   - The project leader should review the status of the issues that are external to the team.
   - The customer and sponsor do not need a review of the issues that will be resolved within the team, but they do need to be informed of the issues that may affect them or that require their assistance or intervention to be resolved.

exhausted its options for problem before the sponsor or customer involved—unless a simple answer ... solve the is... quickly.

5. Solicit feedback from the sponsor and customer on ways to improve the project.
   - Ask the sponsor and customer for feedback on how they perceive the project to be progressing. Solicit ideas from them for improving the project.

Chapter 6

How to Close Out the Project

When the customers of the project accept the final deliverables, it's time to close out the project. A project is closed out when the team members have received and evaluated all feedback on the project, and when the lessons learned from the project and recommendations for improvement have been shared with the organization. This helps future project teams duplicate the successes achieved and avoid the problems and failures experienced by the team.

When you need to:	Do this activity:	Page
Get feedback the of the	Hold a Feedback Customers	154
Analyze and develop ideas for improvement	Hold a Team Meeting to Develop Lessons	157
the with the	Hold a Project the Sponsor	
and for future	Create the Close-out	

Hold a Feedback Meeting with Customers

Why do it?

To solicit feedback and ideas for improvement from the customers of the project. By meeting with customers, the team gets to hear firsthand what they liked and did not like about the project. This helps the team decide how to do it better next time.

How do I do it?

1. Review the commitments that were made to the project.
   - Review with customers the executive summary of the project plan and any changes that were made to the plan.

Although this is a feedback meeting for the customers, the sponsor should be invited as well. The sponsor will then have the opportunity to provide additional feedback to the team.

2. Solicit feedback on the customers' satisfaction with the project's deliverables.
   - Find out how the deliverables have been performing for the customers. What has worked well for the customers, and what has not lived up to their expectations?

solicit feedback before the meeting, and evaluate on that feedback during meeting.

Listen to what the customers have to say without being defensive. The objective is to learn as much as possible from the customers, and the best way to do that is to openly and ask questions.

3. Ask the customers for feedback on the review and approval process.
   - If the customers did not participate in the review and approval process, skip this step.
   - Ask if the customers' expectations for the review process were met. What were they disappointed with? they satisfied with? What do the customers think the team should learn from the process? What ideas do the customers have for improvement?
4. Ask the customers for feedback on their perceptions of how effectively project resources were used.
   - If the customers didn't "pay" for the project, either directly or indirectly (through internal charges), they probably weren't involved in how the resources of the project would be expended. In this case, skip this step.
   - What do the customers the schedule, staff time, and budget? Were they realistic for the project? Is the value of the deliverables more than offset by the expenditures of time, effort, and money?
   - Do the customers have suggestions for improving the way resources are used?

5. Solicit the customers' feedback on the quality and frequency of the progress reports they received during the project.
   - Were the customers satisfied with the reports produced by the project? Did they meet their needs? What ideas do they have for improvement?
6. Ask the customers to evaluate the project process.
   - What was their experience of the process? Were the objectives of the project clearly communicated to them? Was the project plan thorough? Were the customers' interactions with the project leader and project team positive? Did the process for managing change work well?
   - What would the customers have the team do differently next time? How could the project process be improved? What would the customers do differently next time?

The customers the 3-day conference gave on the survey they were not involved in the project process, they could provide on was to provide the

Hold a Team Meeting to Develop Lessons Learned

Why do it?

To review the results from the project and to translate those results into lessons learned and recommendations for improvement. This allows the team to learn from their successes and their mistakes so that they can do a better job next time.

How do I do it?

1. Review the objectives for the project.
   - Review the project objectives as outlined in the charter (see Chapter 2).
   - Review the executive summary of the project plan and any changes that were made to the plan.

feedback is the *and* *is* *key* *before* *meeting* *This information* *be critical* to *evaluating* the *developing the lessons learned from the project.*

2. Compare the real deliverables to those described in the plan (under project scope). Develop lessons learned.
   - really created versus what was planned? Did the deliverables comply with the customers' and sponsor's acceptance criteria? Were the customers satisfied with the deliverables? Was the sponsor satisfied?
   - Was the risk of creating the deliverables assessed accurately? Were the assumptions correct? Were the countermeasures effective?

3. Evaluate the review and approval process.
   - What worked well in the review and approval process? What didn't work well? Were there enough reviews? Were there too many? Did the right people conduct the reviews?
4. Review team membership.
   - Were the right people on the team? Were the ad members useful?
5. Compare the actuals for the schedule, staff time, and budget to the project plan.
   - The project leader should prepare and distribute the report on variances before the meeting. (Calculating a variance is described on page 137.)
   - Were there deviations from the project plan? Why did the deviations occur? Could they have been avoided?
   - Was the risk of not meeting the deadlines for the schedule accurate?

For type 3 projects, each subproject team should develop its own lessons learned and then share these with the project team. The project team should concentrate on lessons learned from the project as a whole.

6. Review the status reports produced project.
   - Were the reports produced on time? Were they helpful in monitoring project? why not?
7. Evaluate the feedback information on the project process, and develop ideas for improvement.
   - Evaluate the feedback from the sponsor and any other key stakeholders that were surveyed.

- Review the survey results, and discuss team members' perceptions of the process. What worked? What didn't work? How did the process for managing change perform? Were the team meetings effective?

Generic Feedback Survey Form

Feedback	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Description	1	2	3	4	5
were clear					
were realistic					
Project team guidelines were followed.					
Project plan was thorough and accurate					
plan was followed					
Change management procedures were effective and useful					
Sponsor and management were helpful in objectives					

Note: with a of 3 or less and any successes.

8. Discuss the lessons learned on the project, and develop ideas for improvement.
   - Discuss lessons learned for each area of the project—deliverables, reviews and approvals, team membership, and so on.
   - What can be improved in each of these project areas so that future teams can avoid making the same mistakes and duplicate the same successes?

Hold a Project Review Meeting with the Sponsor

Why do it?

To review with the sponsor the results of the project and the team's preliminary ideas for improvement. By soliciting the final inputs from the sponsor before the close-out report is written, the team gets the benefit of the sponsor's ideas and creates more acceptance for the team's final recommendations.

How do I do it?

Review the project plan.
   - Review the executive summary of the project plan and any approved changes to the plan.
2. Review the project results.
   - Review the results for the deliverables, the review and approval process, the risks of creating the deliverables, team composition, the schedule, staff time, the budget, and project reports.
3. Discuss with the sponsor the lessons the team learned from the project.
   - Solicit additional lessons learned from the sponsor.
4. Discuss ideas for improvement.
   - Review the team's ideas for improvement. Solicit additional ideas for improvement from the sponsor.

Create the Close-out Report

Why do it?

To create a report for the organization that explains the performance of the project and the lessons learned, and makes recommendations to senior management for improvements to the project management process. By writing a close-out report, the team shares its project experience with management and with future teams so that the lessons learned will be passed onto others.

How do do it?

1. Create an executive summary for the close-out report.
   - Divide the executive summary into the following sections:
     – Project Scope and
     – Schedule
     – Staff Time
     – Costs
     – Lessons Learned
   - Within each section, document the following:
     – The original plan objective, deadline, or limit
     – Any changes made to the plan
     – The actual results of the project, that is, actuals for staff time or budget, actual final deliverable dates, the customer evaluation of the final deliverables
     – What was learned related to that section and what should be done differently next time (in the lessons learned section, summarize the overall lessons learned from the project and recommendations for improvement)

2. Attach reports on project variances; feedback from the customer, sponsor, and team; lessons learned; and recommendations for future projects, if available.
   - Record the feedback received from the customer, sponsor, and team members. Include any results from review meetings.
3. Distribute the report and archive it.
   - Provide a copy of the report to the sponsor, to regular and ad team members, and to other teams that might benefit from the lessons learned.
   - If a program office or steering group exists that oversees projects, send them a copy of the report as well. It will serve as a source of ideas for improvement and as data for possible statistical analysis.

Page 1 of 2

Close-out Report for the 3-Day Conference
Project Dates: January 1 to December 31

Executive Summary

Scope and
[illegible]

Schedule
Plan Date for conference: September 27-29
Actual date of conference: September 27-29

The schedule was adequate and allowed enough time to secure the speakers and the hotel. At least six months needed for these. The brochure and postcard were sent out enough and generated [illegible]. The goal was 300.

Staff Time
Total staff time in plan: 1,375 hours or about 8 months (accuracy)
Changes made to plan: None
Actual time: 1,425 or about 8½ months

[illegible]

Total external in plan: $85,400 (high accuracy)
Changes made to $500 [illegible]
Actual external costs: $84 775

Page 2 of 2

Costs continued

The budget and subsequent changes were adequate to budget limits. The team did not [illegible] the allowance for food should be next year the budget to purchase mailing. The budget and subsequent change orders were **reasonable**.

- Conference location (warm location was a plus)
  Conference site but could be as large as (?)
  Choice and speaker presentations (excellent balance of consultants and
- **Project**
  plan (helpful because the team knew what to do when)

- **Deliverables**
  - Hotel needs more and healthier
  - rooms should be larger with more open space
- **Project**
  More complete in the charter reduce not known work was done
  - Better assessment will reduce rework and

- Analysis of the Schedule, Staff Time, Scope
- Feedback and Customer Surveys
- Project Team Survey

Recommended Activities for the Project Types

The table below lists the types described **in** book **1, 2 and** the specific activities **are** recommended each type. Keep in **mind** is different **and** that your project team should judge the appropriateness of **completing a specific** whether it has been recommended or not.

This table, while intended for all project types, will be the most useful for type 1 project teams since they will be completing the fewest activities and may want to quickly review just these activities. Refer to page 7 to *see* the distinctions between project types.

Project Activities by Chapter	Page	Type 1	Type 2	Type 3
2 **Create a Charter** (sponsor does this)	11–42	ALL	ALL	ALL
3 **Work Together as a Team**			ALL	ALL
4 Create a Project Plan (team does this)	51–134			
Expand on the project scope description	54–55		✔	
Interim deliverables	56–60	✔	✔	✔
Determine	61–63			✔
Create subprojects and assign work	64–68			✔
Complete approval list	70–72	✔		✔

by Chapter	Page		Type 2	3
4 Create a Project Plan continued				
Assess the risk	74–77	✔		
status reports list				✔
Review team membership	83–87	✔	✔	
Construct milestone schedule	89–93			
Create deliverables schedule	94–101			✔
Create activity schedule	102–109		✔	✔
Draw Gantt chart	11 1			
Estimate staff time			✔	✔
Create forecast	118–120			✔
costs	122–127			
Create	128–129			
the plan		✔		✔
5 **Do the Project** (team does this)	135–152	ALL	ALL	ALL
6 **Out the Project** (sponsor, customers, team do this)	153–165	ALL	ALL	ALL

Tool Application Chart

The summarizes how typically use tools in their projects. The last column on the right page) refers to the in that describe the tool. Jagger *A Pocket of* Improvement *and* **is *also* published by**

Tool	Example on page	Use it to . . .	Skill page
Activity Diagram (AND)	N/A	• Identify and calculate the critical path • Determine how to shorten a schedule that does not meet deadlines	3–11
Affinity Diagram	N/A	• Identify customer requirements when they are undefined • Clarify any that is confusing or overwhelming • Achieve breakthroughs in the development of deliverables	
	75	• Generate ideas for an Affinity Diagram • Generate for project (to use a Tree	19–22
Flowchart	10, 145	• Document a process that will be improved or created as part of the project	56–62
Gantt Chart		• Display the project schedule	9

Tool	Example on page	Use it to . . .	BUR page
Matrix Diagram	5	• Record team	85–90
	23	• Document and approvals	
	138	• Display variances from the project plan	
	143	• the listand change requests	
	159	• Document and display customer feedback	
Prioritization Matrices	N/A	• Define customer requirements • Select to reduce • Put objectivity into the decision-making process	105–114
Process Decision Program Chart (PDPC)	N/A	• Assess project risk and create countermeasures • Anticipate and prevent potential problems	160–162
Tree Diagram	65	• Create the breakdown of the project into subprojects and subproject deliverables • Refine customer requirements	158–159

About this Book

The method described in this book was developed by the authors to help simplify the process of a project from concept to completion, consistent with industry standard approaches such as (Project Management Body of Knowledge), with an emphasis on participation, empowerment, individual accountability, and bottom-line results. It utilizes tools and concepts from continuous process improvement and applies them to making project management accessible to anyone working on a project.

About the Authors

Paula K. Martin and Karen Tate, PMP . . .
are co-founders of a management training and consulting firm that specializes in project management training for everyone in an organization, including project teams, project leaders, sponsors, and senior-level managers. also provides management trainingprograms on management and matrix management.

Karen is a project management professional (PMP), certified by She has over 20 years of project management experience—as a project manager, project sponsor, program manager, project trainer, project facilitator, and project She has worked on projects in engineering, manufacturing, design, procurement, construction, and total quality.

Paula also has extensive project management experience. Before becoming a consultant, she directed American Cyanamid's U.S. new product development hundreds of projects and project teams. Paula has also consulted **extensively** on author of *The Buck Stops Here:* ***and the Empowered Manager.***

Order Form for
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00002

Notes

Notes

The Memory Jogger™

This pocket guide—expanded and improved from the original Memory Jogger—is designed to help you improve the procedures, systems, quality, cost, and yields related to your job. The Memory Jogger™ combines the basic Quality Tools and the Seven Management and Tools in an easy-to-use format. It includes continuous improvement tools such as Cause and Effect, Histogram, Run Chart, Pareto Chart, and many more! Available in Spanish, French and other languages.

Code:

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The Team Memory

Easy to read and written from the team member's point of view, *The Team Memory* goes far beyond basic theories to you nuts-and-bolts action steps on preparing to be an effective team member, how to get a good start, get work done in teams, and when and how to end a project. *The Team Memory Jogger™* also teaches you how to deal with problems that can arise a team. its perfect for all employees at all levels. Available in Spanish.

Code:

The Memory

Jogger™ 9000/2000 guide you through the latest modifications to the 9001 standard, with easy-to-follow instructions to prepare for, implement, and **maintain** registration. This powerful pocket guide provides each employee with a clear understanding of the changes in terminology and clause structure from the 1994 standard, and answers key questions about each employee's role in the registration process.

- Updated clause names and structures, paraphrased and organized into easy-to-follow sections. Comparison of and clause structures
- Examples, notes, pitfalls, and illustrations to foster understanding *Code*

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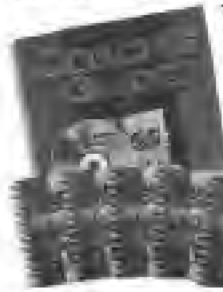

The *Coach's Guide Package* makes it easier than ever to use *The Memory Jogger™ II* as a key resource in your effective training efforts. You can get your teams to better use the Basic Quality Control Tools and Management and Planning Tools so that they can achieve their objectives and improve their self-sufficiency in problems.

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Each tool has a set of overheads that includes:

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The workshop follows the step-by-step method outlined in the Project Management *Jogger™*. This method provides a general, flexible architecture for project management that any team can use to manage all types of projects in the organization. Attendees will gain practical experience by working through a project of their own under the guidance of an experienced instructor.

What You Will Learn

- How to plan, execute, and close out projects using the easy-to-follow, step-by-step method,
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